

=> file reg

FILE 'REGISTRY' ENTERED AT 13:04:54 ON 19 JUN 2002  
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STRUCTURE FILE UPDATES: 17 JUN 2002 HIGHEST RN 431874-59-8  
DICTIONARY FILE UPDATES: 17 JUN 2002 HIGHEST RN 431874-59-8

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
for more information. See STNote 27, Searching Properties in the CAS  
Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d his

(FILE 'HOME' ENTERED AT 10:12:54 ON 19 JUN 2002)

FILE 'LREGISTRY' ENTERED AT 10:16:00 ON 19 JUN 2002

L1 STR  
L2 STR  
L3 STR L2

FILE 'REGISTRY' ENTERED AT 12:18:04 ON 19 JUN 2002

L4 SCR 2043  
L5 35 S L1 AND L2 AND L3 AND L4  
L6 SCR 1993 OR 2016 OR 2021 OR 2026 OR 1929 OR 1918  
L7 22 S L1 AND L2 AND L3 AND L4 NOT L6  
L8 361 S L1 AND L2 AND L3 AND L4 NOT L6 FUL  
SAV L8 LEE512/A

FILE 'HCA' ENTERED AT 12:28:25 ON 19 JUN 2002

L9 290 S L8  
L10 129886 S RESIST OR RESISTS OR PHOTORESIST? OR MASK? OR PHOTOMASK  
L11 11 S L9 AND L10

FILE 'LCA' ENTERED AT 12:29:50 ON 19 JUN 2002

L12 243 S ((PHOTO OR LIGHT OR PHOTOLY?) (2A) (RX# OR RXN# OR REACT?  
L13 268 S ((ULTRAVIOLET? OR ULTRA(W)VIOLET? OR UV# OR SUV OR LUV  
L14 343 S (PHOTORX## OR PHOTOREACT? OR PHOTSENS? OR PHOTOPOLYM?

FILE 'HCA' ENTERED AT 12:32:26 ON 19 JUN 2002

L15 3537 S CHEM? (2A)AMPLIF?  
L16 265410 S L12 OR L13 OR L14  
L17 0 S L9 AND L15

```

L18          34 S L9 AND L16
L19          QUE POS OR POSITIV?
L20          5599 S (POS OR POSITIV?) (2A)WORK?
L21          1 S L18 AND L19
L22          1 S L18 AND L20
L23          1 S L9 AND L20
L24          3 S L9 AND L19
L25          3 S L21 OR L22 OR L23 OR L24
L26          12 S L11 OR L21 OR L22 OR L23 OR L24
L27          28 S L18 NOT L26
L28          3713 S CHEM? (2A) (AMP# OR AMPLIF?)
L29          0 S L9 AND L15

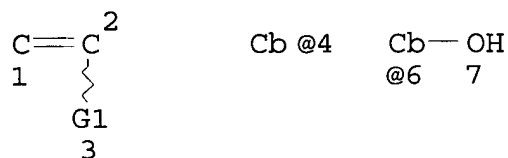
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FILE 'REGISTRY' ENTERED AT 13:04:54 ON 19 JUN 2002

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=> d l8 que stat
L1          STR

```



VAR G1=4/6

NODE ATTRIBUTES:

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DEFAULT MLEVEL IS ATOM
GGCAT IS MCY UNS AT 4
GGCAT IS MCY UNS AT 6
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E6 C AT 4
ECOUNT IS E6 C AT 6

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GRAPH ATTRIBUTES:

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 6

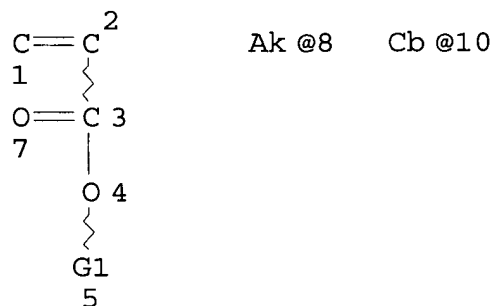
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STEREO ATTRIBUTES: NONE

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L2          STR

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VAR G1=8/10

NODE ATTRIBUTES:

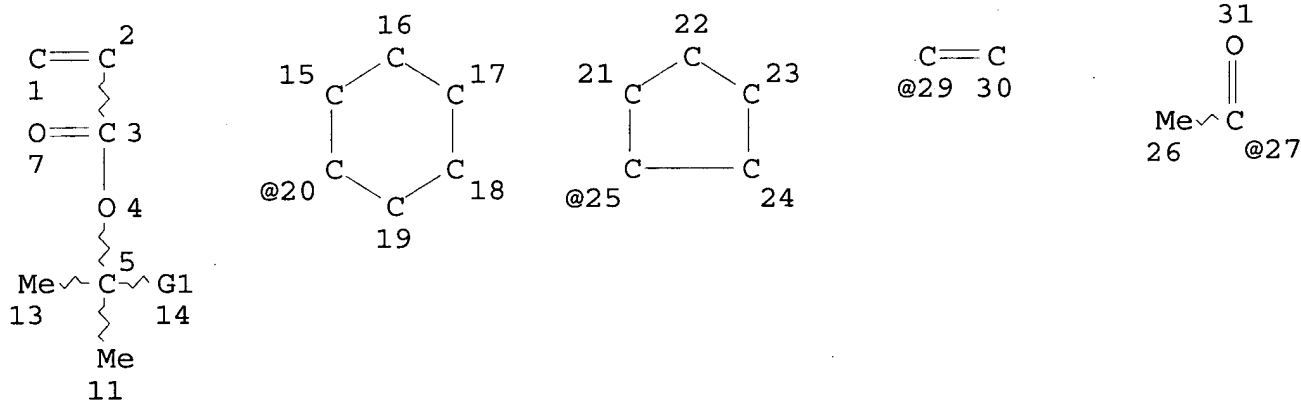
CONNECT IS E1 RC AT 8  
 CONNECT IS E1 RC AT 10  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS LIN SAT AT 8  
 GGCAT IS SAT AT 10  
 DEFAULT ECLEVEL IS LIMITED  
 ECOUNT IS M1-X20 C AT 8  
 ECOUNT IS M3-X20 C AT 10

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L3 STR



VAR G1=I-PR/20/ME/25/29/27/PH/CN

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

L4 SCR 2043

L6 SCR 1993 OR 2016 OR 2021 OR 2026 OR 1929 OR 1918

L8 361 SEA FILE=REGISTRY SSS FUL L1 AND L2 AND L3 AND L4 NOT L6

100.0% PROCESSED 4814 ITERATIONS

361 ANSWERS

SEARCH TIME: 00.00.05

=> file hca

FILE 'HCA' ENTERED AT 13:06:36 ON 19 JUN 2002  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 13 Jun 2002 VOL 136 ISS 25  
FILE LAST UPDATED: 13 Jun 2002 (20020613/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d l26 1-12 cbib abs hitstr hitind

L26 ANSWER 1 OF 12 HCA COPYRIGHT 2002 ACS

131:137786 Electrically conducting polymers having controlled pH, their manufacture, and compositions and structures containing them. Angelopoulos, Marie; Bucchignano, James Joseph; Petrillo, Karen E. (International Business Machines Corp., USA). Jpn. Kokai Tokkyo Koho JP 11203937 A2 19990730 Heisei, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-285069 19981007. PRIORITY: US 1997-946601 19971007.

AB The conducting polymers contain acid groups. The structures have several layers contg. (A) .gtoreq.1 energy-sensitive material layer contg. hydroxystyrene (I)-tert-Bu methacrylate (II) copolymer, I-II-styrene-Me methacrylate copolymer, methacrylate-acrylate copolymer, Si-contg. **resists**, poly(butane sulfone), organometal **resists**, novolak **resists**, or novolak-diazoquinone **resist** and (B) .gtoreq.1 layer contg. the polymers having neutralized acid groups with pH 1-7. The polymers may be (un)substituted poly-p<sup>2</sup>-phenylenes, poly-p-phenylenevinylenes, polyanilines, polyazines, polythiophenes, poly(p-phenylene sulfides), polyfurans, polypyrroles, polyselenophenes, polyacetylenes, or their blends and be neutralized by Me4NOH, Et4NOH, Bu4NOH, Et3N, pyridine, tert-butoxide, morpholine, pyrrolidinone, KOH, NaOH, LiOH, Ph3SOH, amines, proton sponge, or NaH. The compns. contg. the polymers are also claimed.

The polymers are useful for charge-dissipative films in manuf. of electronic devices using **resists**.

IT 233769-38-5, tert-Butyl methacrylate-hydroxystyrene-methyl methacrylate-styrene copolymer  
(**resists**; pH-controlled conducting polymers for charge-dissipative films in electronic device fabrication using **resists**)

RN 233769-38-5 HCA

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with ethenylbenzene, ethenylphenol and methyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

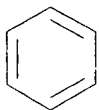
CM 1

CRN 31257-96-2

CMF C8 H8 O

CCI IDS

CDES 8:ID



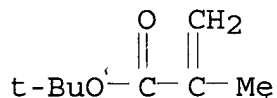
D1-OH

D1-CH=CH<sub>2</sub>

CM 2

CRN 585-07-9

CMF C8 H14 O2



CM 3

CRN 100-42-5

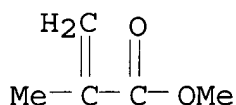
CMF C8 H8

H<sub>2</sub>C=CH-Ph

CM 4

CRN 80-62-6

CMF C5 H8 O2



IC ICM H01B001-12

ICS H01B001-12; G03C001-89; G03F007-038

CC 76-2 (Electric Phenomena)

Section cross-reference(s): 38, 74

ST elec conducting polymer pH control; **resist** conducting  
polymer charge dissipative film; electronic device fabrication  
conducting polymer film

IT Conducting polymers

Electron beam **resists**

Electronic device fabrication

**Photoresists**

pH

(pH-controlled conducting polymers for charge-dissipative films  
in electronic device fabrication using **resists**)

IT Amines, uses

(pH-controlled conducting polymers for charge-dissipative films  
in electronic device fabrication using **resists**)

IT Poly(arylenealkenylenes)

(pH-controlled conducting polymers for charge-dissipative films  
in electronic device fabrication using **resists**)

IT Polyacetylenes, uses

(pH-controlled conducting polymers for charge-dissipative films  
in electronic device fabrication using **resists**)

IT Polyanilines

(pH-controlled conducting polymers for charge-dissipative films  
in electronic device fabrication using **resists**)

IT Polyphenyls

(pH-controlled conducting polymers for charge-dissipative films  
in electronic device fabrication using **resists**)

IT Polythiophenylenes

(pH-controlled conducting polymers for charge-dissipative films  
in electronic device fabrication using **resists**)

IT Polyazomethines

(polyazines; pH-controlled conducting polymers for  
charge-dissipative films in electronic device fabrication using  
**resists**)

IT Polymers, uses

(polythiophenes; pH-controlled conducting polymers for  
charge-dissipative films in electronic device fabrication using  
**resists**)

- IT 75-59-2, Tetramethylammonium hydroxide 77-98-5, Tetraethylammonium hydroxide 110-86-1, Pyridine, uses 110-91-8, Morpholine, uses 121-44-8, uses 1310-58-3, Potassium hydroxide, uses 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, uses 2052-49-5, Tetrabutylammonium hydroxide 7646-69-7, Sodium hydride 16331-65-0, tert-Butoxide, uses 20734-58-1, Proton sponge 28261-54-3, Pyrrolidinone 58621-56-0, Triphenylsulfonium hydroxide (pH-controlled conducting polymers for charge-dissipative films in electronic device fabrication using **resists**)
- IT 25067-54-3, Furan polymers 25233-30-1, Polyaniline 30604-81-0, Polypyrrole 89231-09-4, Polyselenophene (pH-controlled conducting polymers for charge-dissipative films in electronic device fabrication using **resists**)
- IT 9011-14-7, Poly(methyl methacrylate) 116268-69-0, Poly(sulfonyl-1,4-butanediyl) 161982-96-3, tert-Butyl methacrylate-hydroxystyrene copolymer **233769-38-5**, tert-Butyl methacrylate-hydroxystyrene-methyl methacrylate-styrene copolymer (**resists**; pH-controlled conducting polymers for charge-dissipative films in electronic device fabrication using **resists**)

L26 ANSWER 2 OF 12 HCA COPYRIGHT 2002 ACS

131:37787 Deep-**ultraviolet**-sensitive **polymer**

composition for **photoresist**. Nakano, Takanori; Sugiura, Makoto; Endo, Masayuki (JSR Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11143072 A2 19990528 Heisei, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-304601 19971106.

- AB The title compn. contains [A] a copolymer of (1) an unsatd. carboxylic acid and (2) a **radial-polymerizable** compd. contg. epoxy group, and optionally (3) a **radial-polymerizable** compd. [other than (2)] which is polymerizable with (1) and (2) and [B] an adhesion-assisting agent. The compn. has high sensitivity and forms a **pos.-working photoresist** having high transparency, developability, and interlayer adhesion.

IT **227002-06-4P**

(deep-**UV**-sensitive **polymer** compn. contg. polyacrylate and adhesion-assisting agent for transparent **photoresist**)

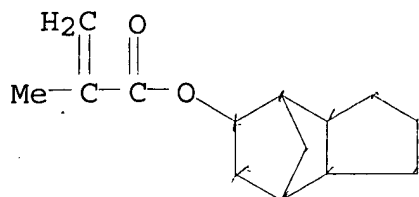
RN 227002-06-4 HCA

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, 1,1-dimethylethyl 2-methyl-2-propenoate, ethenylbenzene, octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 34759-34-7

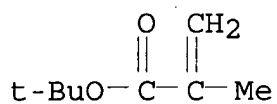
CMF C14 H20 O2



CM 2

CRN 585-07-9

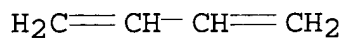
CMF C8 H14 O2



CM 3

CRN 106-99-0

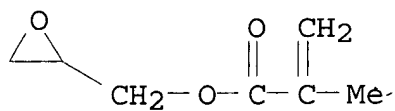
CMF C4 H6



CM 4

CRN 106-91-2

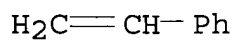
CMF C7 H10 O3



CM 5

CRN 100-42-5

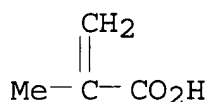
CMF C8 H8



CM 6



CRN 79-41-4  
CMF C4 H6 O2



- IC ICM G03F007-038  
ICS G03F007-038; C08F002-48; G03F007-027; G03F007-085; C09D004-00
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38
- ST deep UV sensitive **polymer** compn  
**photoresist**; polyacrylate alkoxysilane UV sensitive **polymer** compn
- IT **Photoresists**  
(UV, **pos.**; deep-UV-sensitive **polymer** compn. contg. polyacrylate and adhesion-assisting agent for transparent **photoresist**)
- IT 173027-33-3P, Glycidyl methacrylate-methacrylic acid-styrene-p-vinylbenzyl glycidyl ether copolymer 191328-50-4P, Dicyclopentanyl methacrylate-glycidyl methacrylate-methacrylic acid-styrene-p-vinylbenzyl glycidyl ether copolymer 221675-61-2P, Acrylic acid-butadiene-dicyclopentanyl methacrylate-glycidyl methacrylate copolymer **227002-06-4P** 227002-07-5P  
(deep-UV-sensitive **polymer** compn. contg. polyacrylate and adhesion-assisting agent for transparent **photoresist**)
- IT 2530-83-8, (3-Glycidoxypropyl)trimethoxysilane 2530-85-0, (3-Methacryloxypropyl)trimethoxysilane 65799-47-5, (3-Glycidoxypropyl)methyldimethoxysilane  
(deep-UV-sensitive **polymer** compn. contg. polyacrylate and adhesion-assisting agent for transparent **photoresist**)
- L26 ANSWER 3 OF 12 HCA COPYRIGHT 2002 ACS  
130:259587 Process for forming cured film of thermosetting resin. Suzuki, Masayoshi; Utaka, Tomohiro; Endo, Masayuki (JSR Corporation, Japan). Eur. Pat. Appl. EP 908780 A1 19990414, 23 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1998-119024 19981008. PRIORITY: JP 1997-277128 19971009; JP 1998-38443 19980326.
- AB A process for forming a cured film of a thermosetting resin comprising the steps of coating an alkali-sol. thermosetting resin compn. on a substrate, baking it, coating a radiation-sensitive resin compn. on the coated film, baking it, exposing the radiation-sensitive resin compn. on the substrate to radiation through a predetd. **mask**, baking it, carrying out development (with an alk. developer, immersing the substrate carrying

the coated films in a stripping soln., and heating the alkali-sol. thermosetting resin remaining on the substrate to obtain a cured film pattern.

IT 221675-60-1, tert-Butyl methacrylate-dicyclopentanyl methacrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer

(in cured thermosetting resin patterns formed using photoresists)

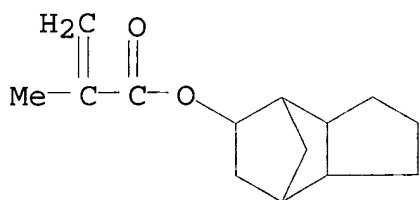
RN 221675-60-1 HCA

CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, ethenylbenzene, octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 34759-34-7

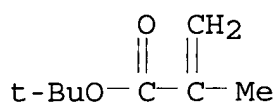
CMF C14 H20 O2



CM 2

CRN 585-07-9

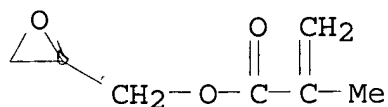
CMF C8 H14 O2



CM 3

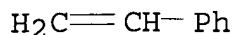
CRN 106-91-2

CMF C7 H10 O3



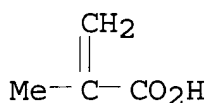
CM 4

CRN 100-42-5  
CMF C8 H8



CM 5

CRN 79-41-4  
CMF C4 H6 O2



IC ICM G03F007-00  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST cured thermosetting resin pattern **photoresist**  
IT **Photoresists**  
(cured thermosetting resin pattern formation using)  
IT Integrated circuits  
Liquid crystal displays  
(cured thermosetting resin pattern formation using **photoresists** for)  
IT Electric insulators  
(cured thermosetting resin patterns formed using **photoresists** as)  
IT Semiconductor devices  
(image pickup elements; cured thermosetting resin pattern formation using **photoresists** for)  
IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer 59269-51-1, Poly(hydroxystyrene) 142541-99-9 144595-69-7, m-Cresol-formaldehyde-2,3-xyleneol-3,4-xyleneol copolymer 204719-40-4  
(cured thermosetting resin patterns formed using **photoresists** contg.)  
IT 38808-51-4, Acrylic acid-glycidyl methacrylate-styrene copolymer 173027-32-2, Glycidyl methacrylate-methacrylic acid-p-vinylbenzyl glycidyl ether copolymer 173027-33-3, Glycidyl methacrylate-methacrylic acid-styrene-p-vinylbenzyl glycidyl ether copolymer **221675-60-1**, tert-Butyl methacrylate-dicyclopentanyl methacrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer 221675-61-2, Acrylic acid-butadiene-dicyclopentanyl methacrylate-glycidyl methacrylate copolymer  
(in cured thermosetting resin patterns formed using **photoresists**)

123:35439 Ultraviolet ray-curable acrylic polymer coating compositions.  
Mita, Takashi (Mitsubishi Rayon Co, Japan). Jpn. Kokai Tokkyo Koho  
JP 06287472 A2 19941011 Heisei, 7 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1993-77120 19930402.

AB The title compns. providing films with good etching resistance on  
rough substrates comprise (a) compds. having a CO<sub>2</sub>H and a  
(meth)acryloyl group 50-90, (b) compds. having .gtoreq.2  
(meth)acryloyl groups 5-20, (c) CO<sub>2</sub>H-contg. acrylic copolymers 5-30,  
(d) leveling agents 0.01-0.5, and (e) photopolymer. initiators 0.1-10  
parts (total 100 parts). Thus, styrene 5, methacrylic acid 20, Bu  
methacrylate 20, tert-Bu methacrylate 8, 2-ethylhexyl methacrylate  
29, and 2-hydroxyethyl methacrylate 18 parts were polymd. to give an  
acrylic copolymer with wt.-av. mol. wt. 14,000, 25 parts of which  
was mixed with Aronix M 5400 60, neopentyl glycol diacrylate 15,  
Diaaid AD 9002 (leveling agent) 0.2, and Irgacure 184 2 parts to  
give a coating compn., which was spread on a degreased steel plate  
having fine pores (diam. 0.2 mm) at dry thickness 10 .mu.m, dried at  
60.degree., irradiated with UV through a **mask**, then alkali  
developed to give a coating film with smooth surface and good  
resistance to an etching soln. (FeCl<sub>2</sub>) at 70.degree..

IT 163215-45-0P 163264-13-9P

(UV-cured etching-resistant acrylic coatings for rough surfaces)

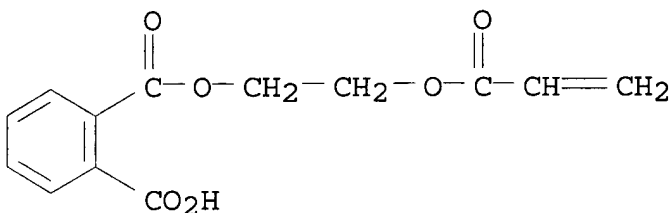
RN 163215-45-0 HCA

CN 1,2-Benzenedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl]  
ester, polymer with butyl 2-methyl-2-propenoate, 1,1-dimethylethyl  
2-methyl-2-propenoate, 2,2-dimethyl-1,3-propanediyl di-2-propenoate,  
ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, 2-hydroxyethyl  
2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX  
NAME)

CM 1

CRN 30697-40-6

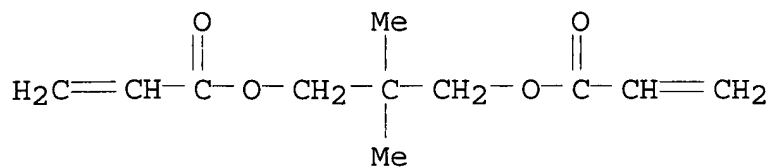
CMF C13 H12 O6



CM 2

CRN 2223-82-7

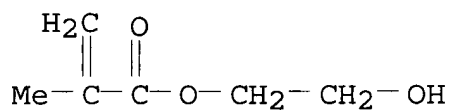
CMF C11 H16 O4



CM 3

CRN 868-77-9

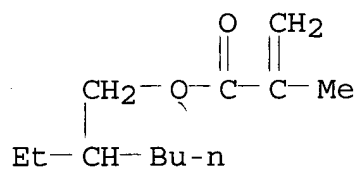
CMF C6 H10 O3



CM 4

CRN 688-84-6

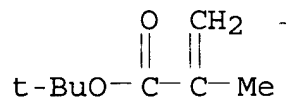
CMF C12 H22 O2



CM 5

CRN 585-07-9

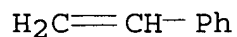
CMF C8 H14 O2



CM 6

CRN 100-42-5

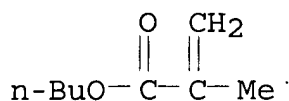
CMF C8 H8



CM 7

CRN 97-88-1

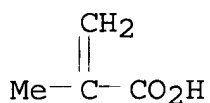
CMF C8 H14 O2



CM 8

CRN 79-41-4

CMF C4 H6 O2



RN 163264-13-9 HCA

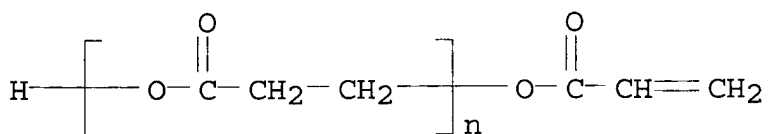
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,3-propanediyl)], 2-hydroxyethyl 2-methyl-2-propenoate and (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 117647-40-2

CMF (C3 H4 O2)<sub>n</sub> C3 H4 O2

CCI PMS



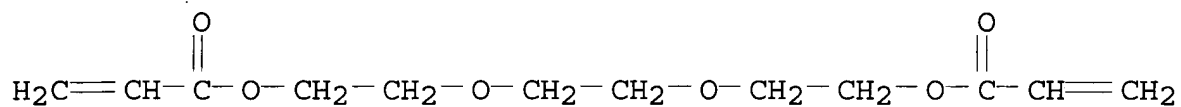
CM 2

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS

CDES \*

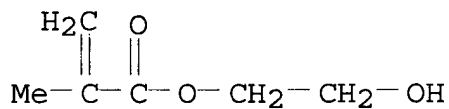


3 ( D1-Me )

CM 3

CRN 868-77-9

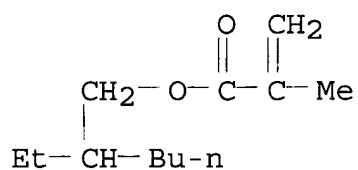
CMF C6 H10 O3



CM 4

CRN 688-84-6

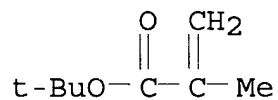
CMF C12 H22 O2



CM 5

CRN 585-07-9

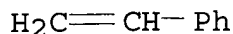
CMF C8 H14 O2



CM 6

CRN 100-42-5

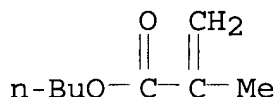
CMF C8 H8



CM 7

CRN 97-88-1

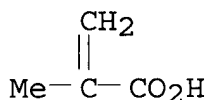
CMF C8 H14 O2



CM 8

CRN 79-41-4

CMF C4 H6 O2



IC ICM C09D004-02

ICS C09D004-00

CC 42-10 (Coatings, Inks, and Related Products)

IT 163215-45-0P 163215-46-1P 163215-47-2P

163264-13-9P

(UV-cured etching-resistant acrylic coatings for rough surfaces)

L26 ANSWER 5 OF 12 HCA COPYRIGHT 2002 ACS

123:35438 Ultraviolet ray-curable solventless coating compositions.

Mita, Takashi (Mitsubishi Rayon Co, Japan). Jpn. Kokai Tokkyo Koho

JP 06287471 A2 19941011 Heisei, 7 pp. (Japanese). CODEN: JKXXAF.

APPLICATION: JP 1993-77119 19930402.

AB The title compns. giving etching-resistant cured coating films with good smoothness comprise (a) compds. having a CO<sub>2</sub>H and a (meth)acryloyl group 25-90, (b) compds. having a OH and a (meth)acryloyl group 5-50, (c) compds. having .gtoreq.2 (meth)acryloyl groups 5-10, (d) CO<sub>2</sub>H-contg. acrylic copolymers 0-15, (e) leveling agents 0.01-0.5, and (f) photopolymn. initiators 0.1-10 parts (total 100 parts). Thus, styrene 5, methacrylic acid 20, Bu methacrylate 20, tert-Bu methacrylate 8, 2-ethylhexyl methacrylate 29, and 2-hydroxyethyl methacrylate 18 parts were polymd. in Solvesso 100 in the presence of AIBN and tert-Bu iso-Pr peroxycarbonate to give an acrylic copolymer with wt.-av. mol. wt. 14,000, 10 parts of which was mixed with Aronix M 5400 38, 2-hydroxyethyl acrylate 45, neopentyl glycol diacrylate 7, Diaaid AD 9002 0.1, and Irgacure 184 2 parts to give a coating compn., which



was spread on a degreased steel plate having fine pores (diam. 0.2 mm) at 10 .mu.m thickness, dried at 60.degree., then irradiated with UV through a **mask** to give a cured film with a smooth surface, which showed good soly. to 5% aq. NaOH at 70.degree. and good resistance to an etching soln. (FeCl2) at 70.degree..

IT 163215-39-2P 163215-41-6P 163215-42-7P  
(UV ray-cured solventless etching-resistant acrylic coatings)

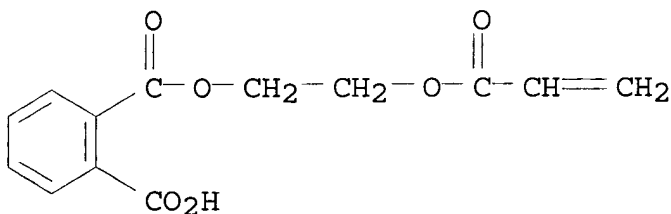
RN 163215-39-2 HCA

CN 1,2-Benzenedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 2,2-dimethyl-1,3-propanediyl di-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 30697-40-6

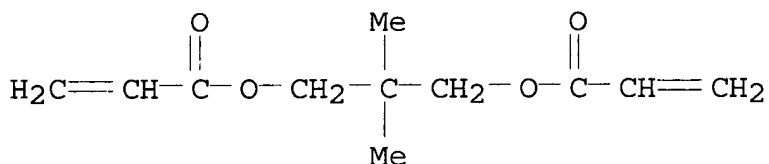
CMF C13 H12 O6



CM 2

CRN 2223-82-7

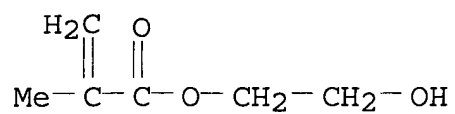
CMF C11 H16 O4



CM 3

CRN 868-77-9

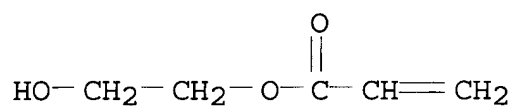
CMF C6 H10 O3



CM 4

CRN 818-61-1

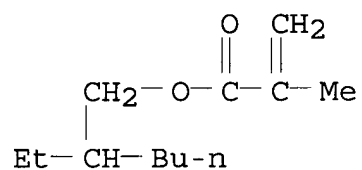
CMF C5 H8 O3



CM 5

CRN 688-84-6

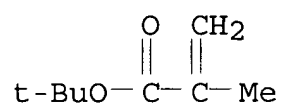
CMF C12 H22 O2



CM 6

CRN 585-07-9

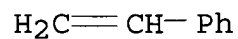
CMF C8 H14 O2



CM 7

CRN 100-42-5

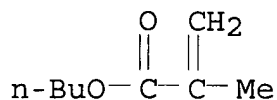
CMF C8 H8



CM 8

CRN 97-88-1

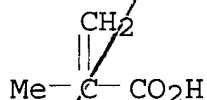
CMF C8 H14 O2



CM 9

CRN 79-41-4

CMF C4 H6 O2



RN 163215-41-6 HCA

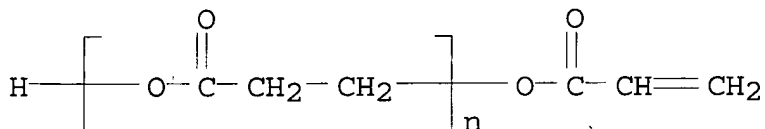
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 2,2-dimethyl-1,3-propanediyl di-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,3-propanediyl)], 2-hydroxyethyl 2-methyl-2-propenoate and 2-hydroxypropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 117647-40-2

CMF (C3 H4 O2)<sub>n</sub> C3 H4 O2

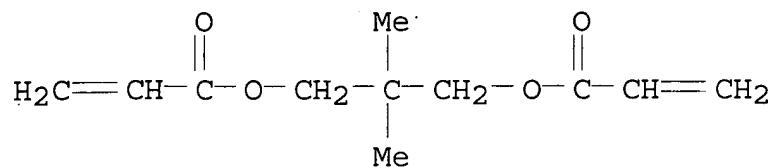
CCI PMS



CM 2

CRN 2223-82-7

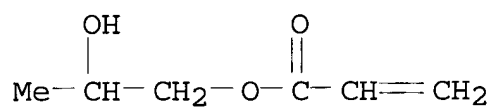
CMF C11 H16 O4



CM 3

CRN 999-61-1

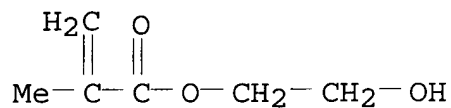
CMF C6 H10 O3



CM 4

CRN 868-77-9

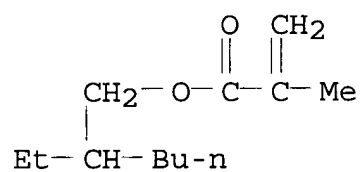
CMF C6 H10 O3



CM 5

CRN 688-84-6

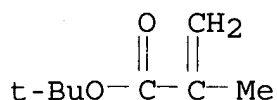
CMF C12 H22 O2



CM 6

CRN 585-07-9

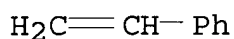
CMF C8 H14 O2



CM 7

CRN 100-42-5

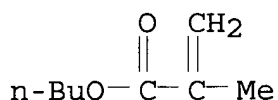
CMF C8 H8



CM 8

CRN 97-88-1

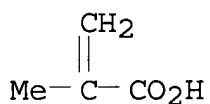
CMF C8 H14 O2



CM 9

CRN 79-41-4

CMF C4 H6 O2



RN 163215-42-7 HCA

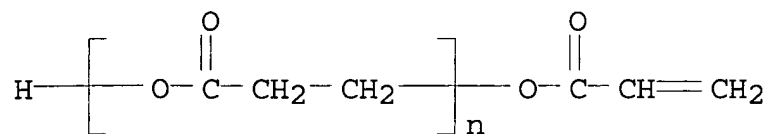
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 3-[2,2-dimethyl-1-oxo-3-[(1-oxo-2-propenyl)oxy]propoxy]-2,2-dimethylpropyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,3-propanediyl)], 2-hydroxyethyl 2-methyl-2-propenoate and 2-hydroxypropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 117647-40-2

CMF (C3 H4 O2)<sub>n</sub> C3 H4 O2

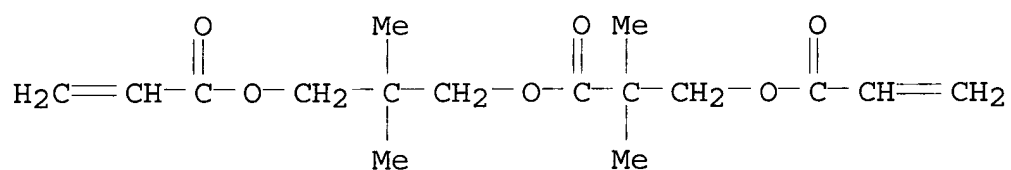
CCI PMS



CM 2

CRN 30145-51-8

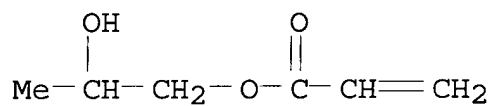
CMF C16 H24 O6



CM 3

CRN 999-61-1

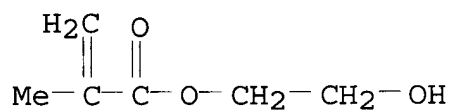
CMF C6 H10 O3



CM 4

CRN 868-77-9

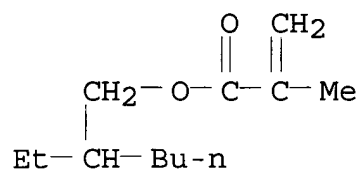
CMF C6 H10 O3



CM 5

CRN 688-84-6

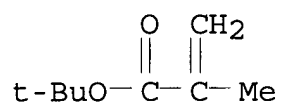
CMF C12 H22 O2



CM 6

CRN 585-07-9

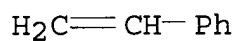
CMF C8 H14 O2



CM 7

CRN 100-42-5

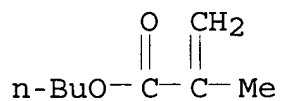
CMF C8 H8



CM 8

CRN 97-88-1

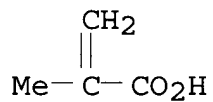
CMF C8 H14 O2



CM 9

CRN 79-41-4

CMF C4 H6 O2



IC ICM C09D004-02  
ICS C09D004-00

CC 42-10 (Coatings, Inks, and Related Products)

IT 163215-39-2P 163215-40-5P 163215-41-6P  
163215-42-7P 163215-43-8P 163215-44-9P

(UV ray-cured solventless etching-resistant acrylic coatings)

L26 ANSWER 6 OF 12 HCA COPYRIGHT 2002 ACS

122:252112 Photosensitive composition for forming patterns. Takechi, Satoshi; Takahashi, Makoto; Kaimoto, Yuko (Fujitsu Ltd., Japan). Ger. Offen. DE 4409220 A1 19941117, 12 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1994-4409220 19940318. PRIORITY: JP 1993-110471 19930512.

AB The title compn. comprises a copolymer having a repeating unit of a polycyclic arom. ring, a condensed ring with .gtoreq.1 arom. ring, or an arom. ring with a substituent from an alicyclic group, alkyl, or a halogen; and a repeating unit or of monomer contg. a photosensitive group. The material can provide patterns with desired dimensional accuracy.

IT 162547-90-2

(photosensitive compn. contg. copolymer from an arom. cyclic compd.)

RN 162547-90-2 HCA

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 4-ethenylphenol and tricyclo[3.3.1.3<sup>7</sup>]dec-1-yl 2-propenoate (9CI) (CA INDEX NAME)

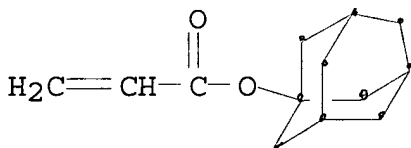
CM 1

CRN 121601-93-2

CMF C13 H18 O2

*equiv. to*

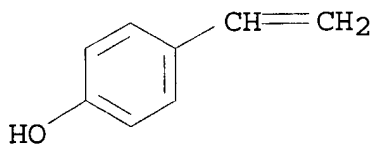
5,443,690



CM 2

CRN 2628-17-3

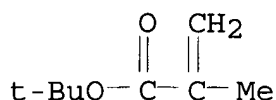
CMF C8 H8 O



CM 3



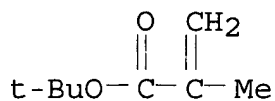
CRN 585-07-9  
CMF C8 H14 O2



- IC ICM G03F007-039  
ICS C08L025-18; C08L033-04  
ICA C08J003-28  
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST **photoresist** copolymer photosensitive compn  
IT **Resists**  
(photo-, photosensitive compn. contg. copolymer from an arom. cyclic compd.)  
IT **162547-90-2** 162547-91-3 162547-92-4 162547-93-5  
162547-94-6  
(photosensitive compn. contg. copolymer from an arom. cyclic compd.)
- L26 ANSWER 7 OF 12 HCA COPYRIGHT 2002 ACS  
118:256682 Acrylic resin composition for powder coating. Toyoda, Yuji; Uenaka, Akimitsu; Tchimura, Hideki; Ueno, Tasabura; Tsutsui, Koichi (Nippon Paint Co., Ltd., Japan). Eur. Pat. Appl. EP 517536 A2 19921209, 11 pp. DESIGNATED STATES: R: DE, FR, GB, IT. (English). CODEN: EPXXDW. APPLICATION: EP 1992-305172 19920605. PRIORITY: JP 1991-233670 19910606.
- AB A low-temp.-curable coating which **resists** reaction in the solid state comprises (a) a resin prepd. from tert-Bu (meth)acrylate, a functional ethylenically unsatd. monomer, and other ethylenically unsatd. monomer(s), having glass-transition temp. (Tg) 30-100.degree., functional group content 0.0010-0.0046 mol/g, and no.-av. mol. wt. (Mn) 1000-20,000, and (b) a hardener. A powder coating compn. contg. 28.3:45:6.7:20 tert-Bu methacrylate-glycidyl methacrylate-Me methacrylate-styrene copolymer (Tg 61.degree., Mn 4000) 48.2, 1,10-decanedicarboxylic acid 12.0, benzoin 0.29, YF-3919 0.10, and Epo Tohto YD 012 2.2 parts was applied to an Al plate and baked at 150.degree. for 10 min and 140.degree. for 20 min to give coatings having good solvent and blocking resistance and resistance to solid state reaction after 2 mo at 30.degree..
- IT **131151-71-8** **131151-71-8D**, reaction products with di-Bu phosphate **147898-32-6** **147933-97-9**  
(powder coating contg., low-temp. curable, with good solvent and blocking resistance)
- RN 131151-71-8 HCA  
CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with ethenylbenzene, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

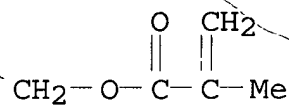
CM 1

CRN 585-07-9  
CMF C8 H14 O2



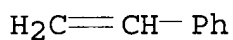
CM 2

CRN 106-91-2  
CMF C7 H10 O3



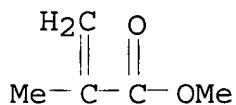
CM 3

CRN 100-42-5  
CMF C8 H8



CM 4

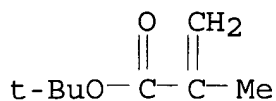
CRN 80-62-6  
CMF C5 H8 O2



RN 131151-71-8 HCA  
CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with ethenylbenzene, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

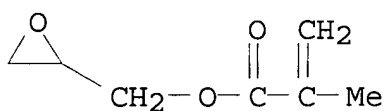
CRN 585-07-9  
CMF C8 H14 O2



CM 2

CRN 106-91-2

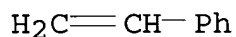
CMF C7 H10 O3



CM 3

CRN 100-42-5

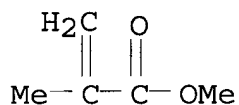
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2



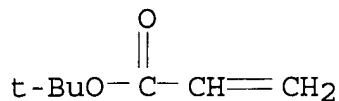
RN 147898-32-6 HCA

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with  
 1,1-dimethylethyl 2-propenoate, ethenylbenzene, methyl  
 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI)  
 (CA INDEX NAME)

CM 1

CRN 1663-39-4

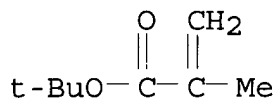
CMF C7 H12 O2



CM 2

CRN 585-07-9

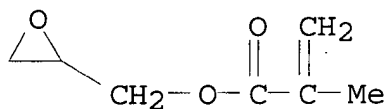
CMF C8 H14 O2



CM 3

CRN 106-91-2

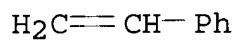
CMF C7 H10 O3



CM 4

CRN 100-42-5

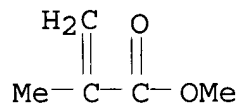
CMF C8 H8



CM 5

CRN 80-62-6

CMF C5 H8 O2



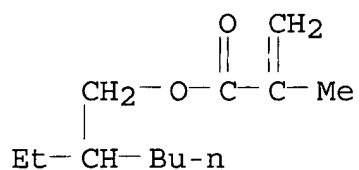
RN 147933-97-9 HCA

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, methyl

2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

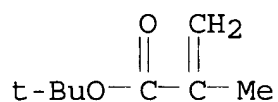
CM 1

CRN 688-84-6  
CMF C12 H22 O2



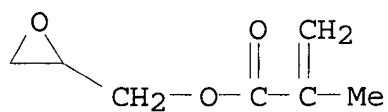
CM 2

CRN 585-07-9  
CMF C8 H14 O2



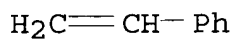
CM 3

CRN 106-91-2  
CMF C7 H10 O3



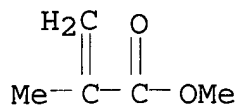
CM 4

CRN 100-42-5  
CMF C8 H8



CM 5

CRN 80-62-6  
CMF C5 H8 O2



IT 147898-33-7 147898-35-9 147898-36-0

(powder coating, crosslinked, with solvent and blocking resistance and resistance to solid-state reaction)

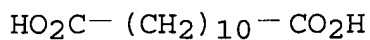
RN 147898-33-7 HCA

CN Dodecanedioic acid, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 693-23-2

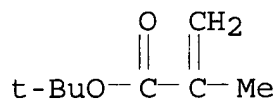
CMF C12 H22 O4



CM 2

CRN 585-07-9

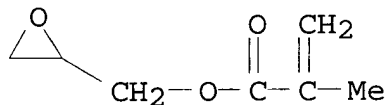
CMF C8 H14 O2



CM 3

CRN 106-91-2

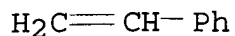
CMF C7 H10 O3



CM 4

CRN 100-42-5

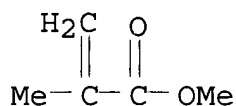
CMF C8 H8



CM 5

CRN 80-62-6

CMF C5 H8 O2



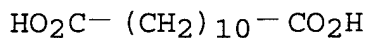
RN 147898-35-9 HCA

CN Dodecanedioic acid, polymer with 1,1-dimethylethyl  
2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl  
2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and  
oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 693-23-2

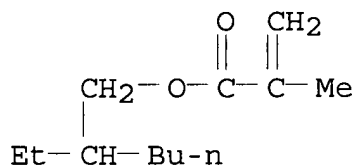
CMF C12 H22 O4



CM 2

CRN 688-84-6

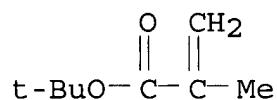
CMF C12 H22 O2



CM 3

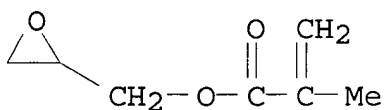
CRN 585-07-9

CMF C8 H14 O2



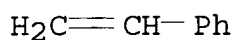
CM 4

CRN 106-91-2  
CMF C7 H10 O3



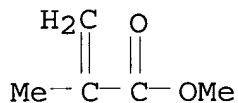
CM 5

CRN 100-42-5  
CMF C8 H8



CM 6

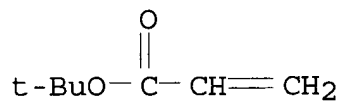
CRN 80-62-6  
CMF C5 H8 O2



RN 147898-36-0 HCA  
CN Dodecanedioic acid, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

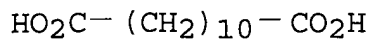
CRN 1663-39-4  
CMF C7 H12 O2



CM 2

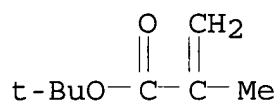


CRN 693-23-2  
CMF C12 H22 O4



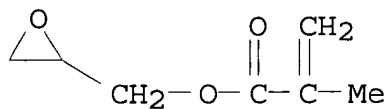
CM 3

CRN 585-07-9  
CMF C8 H14 O2



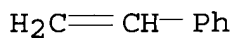
CM 4

CRN 106-91-2  
CMF C7 H10 O3



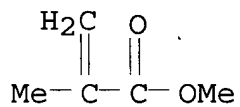
CM 5

CRN 100-42-5  
CMF C8 H8



CM 6

CRN 80-62-6  
CMF C5 H8 O2



IC ICM C09D005-03  
ICS C09D133-06; C08G059-32; C08G059-42  
CC 42-7 (Coatings, Inks, and Related Products)

- IT 107-66-4D, Dibutyl phosphate, reaction products with glycidyl methacrylate copolymer 123449-79-6 131151-71-8  
 131151-71-8D, reaction products with di-Bu phosphate  
 147898-32-6 147933-97-9  
 (powder coating contg., low-temp. curable, with good solvent and blocking resistance)
- IT 147898-33-7 147898-34-8 147898-35-9  
 147898-36-0  
 (powder coating, crosslinked, with solvent and blocking resistance and resistance to solid-state reaction)

L26 ANSWER 8 OF 12 HCA COPYRIGHT 2002 ACS

118:179910 Direct-~~positive~~ silver halide photographic material and its processing. Ono, Koji (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 04296846 A2 19921021 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-63128 19910327.

AB For the title material, the thickness of the protecting layer is 1.1-3.0 .mu.m, the protecting layer thickness/emulsion layer thickness ratio is .ltoreq.0.5, and the total thickness of the emulsion layers and the protecting layer is .ltoreq.5 .mu.m. The protecting layer in the title material also contains a matting agent with av. particle diam. .ltoreq.4 .mu.m. The total processing time for the title material is .ltoreq.60 s. The title material also contains a hydrophobic polymer. The title material is pressure-resistant and shows high sensitivity.

IT 29497-08-3  
 (photog. material contg.)

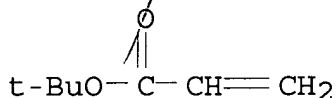
RN 29497-08-3 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

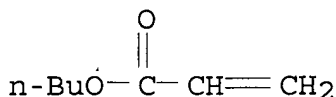
CMF C7 H12 O2



CM 2

CRN 141-32-2

CMF C7 H12 O2



CM 3

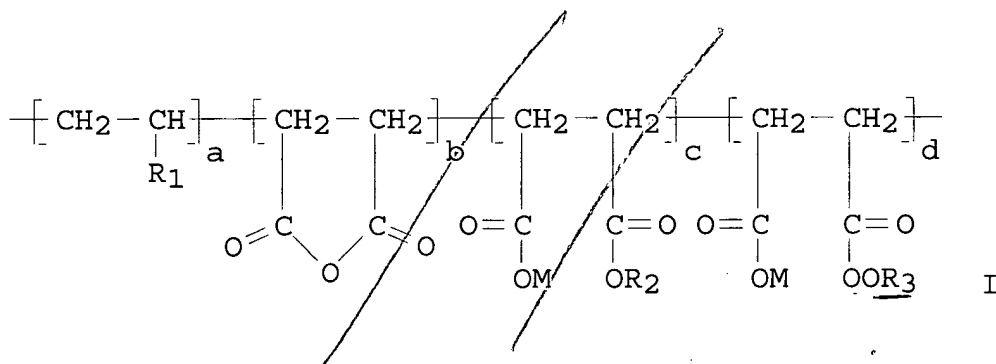
CRN 100-42-5  
CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$ 

IC ICM G03C001-485  
ICS G03C001-04; G03C001-32  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST silver halide photog material; direct **pos** photog material; high sensitivity photog material; pressure resistance photog material; matting agent photog material  
IT 25085-39-6 26264-85-7 26591-47-9 **29497-08-3**  
137188-67-1 138918-76-0 146122-53-4  
(photog. material contg.)

L26 ANSWER 9 OF 12 HCA COPYRIGHT 2002 ACS  
110:202937 Photohardenable compositions containing maleic anhydride copolymer binders. Roth, Christoph; Steinert, Volker; Plaschnick, Dieter; Weigt, Wilfried (VEB Filmfabrik Wolfen, Ger. Dem. Rep.). Ger. (East) DD 256202 A1 19880427, 7 pp. (German). CODEN: GEXXA8. APPLICATION: DD 1984-268119 19841008.

GI



AB Aq. alk. soln.-developable photopolymerizable compns., having both improved sensitivity and adhesion to supports, are composed of .gtoreq.1 photoinitiator, an ethylenically unsatd. compd., and a binder of the formula I ( $\text{R}_1 = \text{H}, \text{Me}, \text{BuO}, \text{aryl}, \text{substituted aryl}$ ;  $\text{R}_2 = \text{C1-8 alkyl}$ ;  $\text{R}_3 = \text{aliph., cyclic, or arom. alkyl}$ ;  $\text{M} = \text{H, monovalent cation}$ ;  $a, d = 100 \text{ to } 2000$ ;  $b, c = 0-2000$ ). The compns. are esp. useful for the prodn. of relief images or coatings for information recording materials, printed circuits, or printing plates. Thus, a PET support coated with a compn. contg.  $\text{Me}_2\text{CO}$ , MEK, benzoin iso-Bu ether, trimethylolpropane triacrylate, 2,6-di-tert-butylcresol, ethylene-maleic anhydride-mono-tert-Bu maleate copolymer was exposed

through a dot screen, developed with an aq. NaOH soln., and dried to show uniform dots with a sym. form.

IT 120515-35-7  
(photopolymerizable compns. contg. binder from, for relief images)

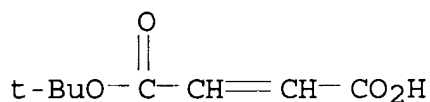
RN 120515-35-7 HCA

CN 2-Butenedioic acid, mono(1,1-dimethylethyl) ester, polymer with ethenylbenzene and methyl hydrogen 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 120515-28-8

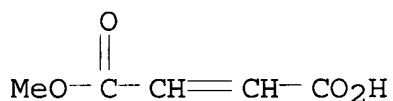
CMF C8 H12 O4



CM 2

CRN 44836-34-2

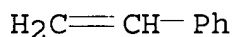
CMF C5 H6 O4



CM 3

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-68

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **Resists**

(photo-, contg. maleic anhydride copolymer binders)

IT 120515-29-9 120515-30-2 120515-32-4 120515-33-5 120515-34-6  
120515-35-7

(photopolymerizable compns. contg. binder from, for relief images)

L26 ANSWER 10 OF 12 HCA COPYRIGHT 2002 ACS

110:15921 Polymeric materials and their use as **resists**.

Affrossman, Stanley; Bakhshae, Massoud; Pethrick, Richard Arthur; Sherrington, David Colin (National Research Development Corp., UK). Eur. Pat. Appl. EP 276108 A2 19880727, 8 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1988-300369 19880118. PRIORITY: GB 1987-1021 19870119.

AB Polymeric materials useful as **pos. resists** comprise a backbone formed from an addn. polymer which is degradable by radiation and at least 3 pendant polymeric groups which show no appreciable **pos. resist** characteristics. Preferably these materials comprise a backbone which is a polymethacrylate ester and from 3 to 5 pendant polystyrene groups. These polymers exhibit increased sensitivity and resistance to plasma processing and provide **resists** which are useful as components of integrated circuits. Thus, a **resist** prep. from a comb copolymer of styrene and Me methacrylate had sensitivity 460 .mu.C/cm<sup>2</sup>, and contrast 2.9 for exposure time 2 min.

IT **97649-85-9**  
(**photoresist** from, plasma etching resistant)

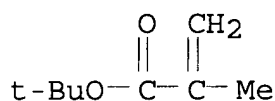
RN 97649-85-9 HCA

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with ethenylbenzene and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 585-07-9

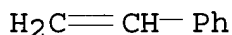
CMF C8 H14 O2



CM 2

CRN 100-42-5

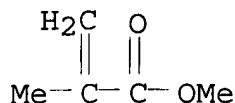
CMF C8 H8



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM G03F007-10  
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 76  
 ST **photoresist** comb copolymer styrene methacrylate; integrated circuit **photoresist** degradable polymer; etching resistant **photoresist**  
 IT 25034-86-0, Methyl methacrylate-styrene comb copolymer  
 97649-85-9  
 (**photoresist** from, plasma etching resistant)

L26 ANSWER 11 OF 12 HCA COPYRIGHT 2002 ACS  
 108:39737 Resin compositions for coatings. Sakamoto, Hiroshi; Maruyama, Kazuyoshi (Dainippon Ink and Chemicals, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 62132973 A2 19870616/Showa, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1985-273668 19851205.

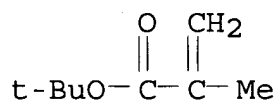
AB Coatings resisting alcs., wear, and migration of plasticizers from PVC contain polymers [glass temp. (Tg) 60-110.degree., no.-av. mol. wt. (Mn) 5,000-50,000] from unsatd. carboxylic acids 0.5-15, Me methacrylate (I) 50-90 and comonomers 0-49.5%. A 10:800:50:80 methacrylic acid (II)-I-styrene-tert-Bu methacrylate copolymer (Mn 23,000, Tg 90.degree.) was mixed with Al paste, nitrocellulose, and 4:4:2 EtOAc-BuOH-BuOCH<sub>2</sub>CH<sub>2</sub>OH, coated on polystyrene, and baked at 60.degree. for 0.5 h to give a coating with good resistance to plasticizer migration, abrasion (105 cycles) and MeOH 940 rubs); vs. poor, 80 and 20, resp., with only 3 parts II.

IT 112310-44-8, tert-Butyl methacrylate-lauryl methacrylate-methacrylic acid-methyl methacrylate-styrene copolymer  
 112310-47-1, tert-Butyl methacrylate-fumaric acid-lauryl methacrylate-methyl methacrylate-styrene copolymer  
 (coatings, **resist** to wear, alcs. and plasticizer migration)

RN 112310-44-8 HCA  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, ethenylbenzene and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

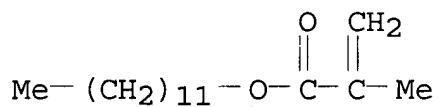
CM 1

CRN 585-07-9  
 CMF C8 H14 O2



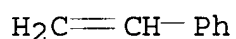
CM 2

CRN 142-90-5  
CMF C16 H30 O2



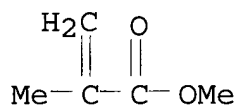
CM 3

CRN 100-42-5  
CMF C8 H8



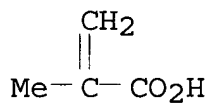
CM 4

CRN 80-62-6  
CMF C5 H8 O2



CM 5

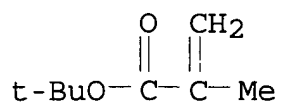
CRN 79-41-4  
CMF C4 H6 O2



RN 112310-47-1 HCA  
CN 2-Butenedioic acid (2E)-, polymer with 1,1-dimethylethyl  
2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, ethenylbenzene  
and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

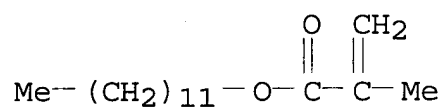
CRN 585-07-9  
CMF C8 H14 O2



CM 2

CRN 142-90-5

CMF C16 H30 O2



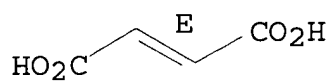
CM 3

CRN 110-17-8

CMF C4 H4 O4

CDES 2:E

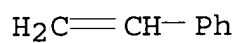
Double bond geometry as shown.



CM 4

CRN 100-42-5

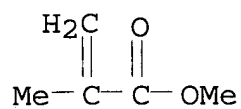
CMF C8 H8



CM 5

CRN 80-62-6

CMF C5 H8 O2



IC ICM C09D003-80



ICA C08F220-14  
 CC 42-7 (Coatings, Inks, and Related Products)  
 IT **112310-44-8**, tert-Butyl methacrylate-lauryl  
 methacrylate-methacrylic acid-methyl methacrylate-styrene copolymer  
 112310-45-9, tert-Butyl methacrylate-isobutyl methacrylate-lauryl  
 methacrylate-methacrylic acid-methyl methacrylate copolymer  
 112310-46-0, Isobutyl methacrylate-lauryl methacrylate-methacrylic  
 acid-methyl methacrylate-styrene copolymer **112310-47-1**,  
 tert-Butyl methacrylate-fumaric acid-lauryl methacrylate-methyl  
 methacrylate-styrene copolymer  
 (coatings, **resist** to wear, alcs. and plasticizer  
 migration)

L26 ANSWER 12 OF 12 HCA COPYRIGHT 2002 ACS

88:113364 Light-sensitive resin composition for **photoresists**.  
 Tsukada, Katsushige; Hayashi, Nobuyuki; Yamada, Hideo; Ishimaru,  
 Toshiaki; Kakumaru, Hajime (Hitachi Chemical Co., Ltd., Japan).  
 Ger. Offen. DE 2714218 19771027, 32 pp. (German). CODEN: GWXXBX.  
 APPLICATION: DE 1977-2714218 19770330.

AB Light-sensitive resin compns. for the prodn. of **photoresists**  
 contain a linear polymer or mixed polymer with tetrahydrofurfuryl  
 groups in the side chain, .gtoreq.1 phtopolymerizable compd. with  
 .gtoreq.2 ethylenically unsatd. end groups, and .gtoreq.1  
 photoinitiator. Thus, a typical **photoresist** compn.  
 contains a methacrylic acid-Me methacrylate-tetrahydrofurfuryl  
 methacrylate copolymer (2:78:20) 50, trimethylolpropane triacrylate  
 30, propylene glycol diacrylate 10, benzophenone 2.7, Michler's  
 ketone 0.3, p-methoxyphenol 0.5, and MeCOEt 200 parts.

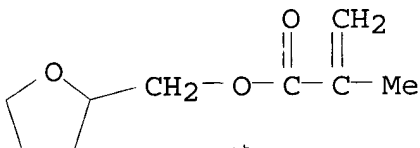
IT **65697-15-6**  
 (**photoresist** compns. contg.)

RN 65697-15-6 HCA  
 CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with  
 ethenylbenzene, methyl 2-methyl-2-propenoate and  
 (tetrahydro-2-furanyl)methyl 2-methyl-2-propenoate (9CI) (CA INDEX  
 NAME)

CM 1

CRN 2455-24-5

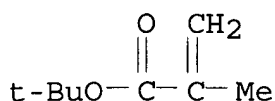
CMF C9 H14 O3



CM 2

CRN 585-07-9

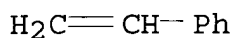
CMF C8 H14 O2



CM 3

CRN 100-42-5

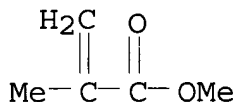
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2



IC C08L033-08

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST tetrahydrofurfuryl acrylate polymer **photoresist**IT **Resists**

(photo-, contg. tetrahydrofurfuryl group-contg. polymer)

IT 25035-85-2 65697-12-3 65697-13-4 65697-14-5 **65697-15-6**  
 65697-16-7 65697-17-8 65697-18-9 65697-19-0 65697-20-3  
 65932-02-7

(photoresist compns. contg.)

IT 84-51-5 90-94-8 119-61-9, uses and miscellaneous 150-76-5  
 548-62-9 574-09-4 3524-66-1 3524-68-3 4986-89-4 15625-89-5  
 19778-85-9 24448-20-2 25067-24-7 25322-69-4 25852-47-5  
 28883-57-0 50858-51-0 52496-08-9

(photoresist compns. contg. tetrahydrofurfuryl group-contg. polymer and)

IT 65722-01-2

(photoresists contg. tetrahydrofurfuryl acrylate polymer and)

=&gt; d 127 1-28 cbib abs hitstr hitind

L27 ANSWER 1 OF 28 HCA COPYRIGHT 2002 ACS

136:207756 Heat-developing photographic material with improved storage

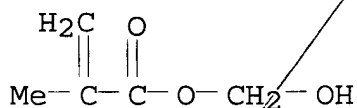
stability capable of being prepared by applying coating material in aqueous solvent. Motokui, Yasuyuki; Kurachi, Ikuo; Ueda, Eiichi; Onuma, Kenji; Ezure, Hidetoshi (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2002062610 A2 20020228; 29 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-249696 20000821.

- AB The photog. material, having a **photosensitive** layer contg. Ag halides, org. Ag salts, and a binder on a support, is characterized by the binder showing Ag ion diffusion coeff.  $< 3 \times 10^{-15} \text{ cm}^2/\text{s}$  at 25.degree. and  $> 3 \times 10^{-15} \text{ cm}^2/\text{s}$  at 100.degree.. Alternatively, the material has (A)  $> 1 \times 10^{-15} \text{ cm}^2/\text{s}$  **photosensitive** layer contg. a dispersion of composite fine particles involving water-dispersible org. Ag salt or a dispersion of solid org. Ag salt fine particles and a surface-protecting layer contg. a latex with glass-transition temp.  $> 50 \text{ degree.}$  on a support, (B) a support contg. syndiotactic styrene polymers, or (C) an underlayer made of vinylidene chloride polymers.
- IT **156349-87-0**, Butyl acrylate-tert-butyl acrylate-hydroxymethyl methacrylate-styrene copolymer (latex, binder; heat-developing photog. material with protective layer contg.)
- RN **156349-87-0** HCA
- CN 2-Propenoic acid, 2-methyl-, hydroxymethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 21982-30-9

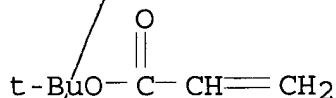
CMF C5 H8 O3



CM 2

CRN 1663-39-4

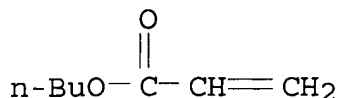
CMF C7 H12 O2



CM 3

CRN 141-32-2

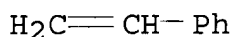
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



- IC ICM G03C001-498  
ICS G03C001-498; G03C001-76
- CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38
- IT Latex  
(binder; heat-developing photog. material with **photosensitive** layer contg.)
- IT Gelatins, uses  
(binder; heat-developing photog. material with **photosensitive** layer contg.)
- IT 87006-82-4P, Ethylene glycol dimethacrylate-methyl methacrylate-stearyl methacrylate copolymer  
(latex, binder; heat-developing photog. material with **photosensitive** layer contg.)
- IT 9003-01-4, Poly(acrylic acid) 9003-55-8, Butadiene-styrene copolymer  
(latex, binder; heat-developing photog. material with **photosensitive** layer contg.)
- IT 156349-87-0, Butyl acrylate-tert-butyl acrylate-hydroxymethyl methacrylate-styrene copolymer 401788-64-5, Cyclohexanedicarboxylic acid-cyclohexanedimethanol-ethylene glycol-isophthalic acid-sodium sulfoisophthalate-terephthalic acid copolymer  
(latex, binder; heat-developing photog. material with protective layer contg.)

L27 ANSWER 2 OF 28 HCA COPYRIGHT 2002 ACS  
135:196573 **UV-crosslinkable** pressure-sensitive adhesive compositions containing styrene-acrylic block copolymers and their preparation. Doi, Tomoko; Moroishi, Yutaka; Yamamoto, Michiharu; Kawaguchi, Yoshihide; Nakano, Fumiko (Nitto Denko Corporation, Japan). Eur. Pat. Appl. EP 1127934 A1 20010829, 19 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 2001-104745 20010226. PRIORITY: JP 2000-56002 20000228; JP 2000-256670 20000828; JP 2000-354244

20001121.

AB The adhesive compn. having improved weathability, useful for pressure-sensitive adhesive sheets, comprises (a) a styrene-acrylic block copolymer (.gtoreq.1 styrenic polymer block and .gtoreq.1 acrylic polymer block) obtained by living radical polymn. of styrenic monomer (e.g., styrene) and .gtoreq.1 acrylic monomer (e.g., Bu acrylate and 6-hydroxyhexyl acrylate) in the presence of an activating agent contg. a transition metal and its ligand (e.g., copper bromide and 2,2'-bipyridine) and a polymn. initiator (e.g., 2-hydroxyethyl 2-bromo-2-methylpropionate), and (b) a trichloromethyl group-contg. triazine deriv. [e.g., TAZ 104 (2-(p-methoxyphenyl)-4,6-bis(trichloromethyl)s-triazine)] as photoinitiator.

IT 357269-52-4P

(crosslinked; UV-crosslinkable

pressure-sensitive adhesive compns. contg. styrene-acrylic block copolymers)

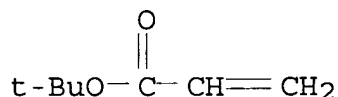
RN 357269-52-4 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate and ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

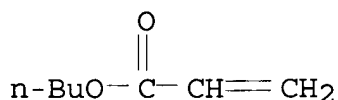
CMF C7 H12 O2



CM 2

CRN 141-32-2

CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



IC ICM C09J153-00

ICS C08F293-00; C09J007-02

CC 38-3 (Plastics Fabrication and Uses)

ST **UV crosslinked** pressure sensitive adhesive  
sheet; styrene acrylic block copolymer adhesive weathability;  
trichloromethyl triazine photoinitiator pressure sensitive adhesive

IT Polyesters, miscellaneous  
(**UV-crosslinkable** pressure-sensitive adhesive  
compns. contg. styrene-acrylic block copolymers)

IT Polymerization **catalysts**  
(block, living; **UV-crosslinkable**  
pressure-sensitive adhesive compns. contg. styrene-acrylic block  
copolymers)

IT **Polymerization**  
(living, radical; **UV-crosslinkable**  
pressure-sensitive adhesive compns. contg. styrene-acrylic block  
copolymers)

IT Adhesives  
(**photocurable**, pressure-sensitive; **UV-**  
**crosslinkable** pressure-sensitive adhesive compns. contg.  
styrene-acrylic block copolymers)

IT **Polymerization catalysts**  
(**photopolymer**; **UV-crosslinkable**  
pressure-sensitive adhesive compns. contg. styrene-acrylic block  
copolymers)

IT Adhesives  
(pressure-sensitive, sheets; **UV-crosslinkable**  
pressure-sensitive adhesive compns. contg. styrene-acrylic block  
copolymers)

IT 190260-57-2  
(TAZ PP, photoinitiator; **UV-crosslinkable**  
pressure-sensitive adhesive compns. contg. styrene-acrylic block  
copolymers)

IT 7787-70-4, Copper bromide (CuBr) 369370-94-5  
(**UV-crosslinkable** pressure-sensitive adhesive  
compns. contg. styrene-acrylic acid block copolymers)

IT 366-18-7, 2,2'-Bipyridine  
(**UV-crosslinkable** pressure-sensitive adhesive  
compns. contg. styrene-acrylic block copolymers)

IT 248603-11-4P, Ethylene bis(2-bromo-2-methylpropionate)  
(**UV-crosslinkable** pressure-sensitive adhesive  
compns. contg. styrene-acrylic block copolymers)

IT 25038-59-9, Poly(ethylene terephthalate), miscellaneous  
(**UV-crosslinkable** pressure-sensitive adhesive  
compns. contg. styrene-acrylic block copolymers)

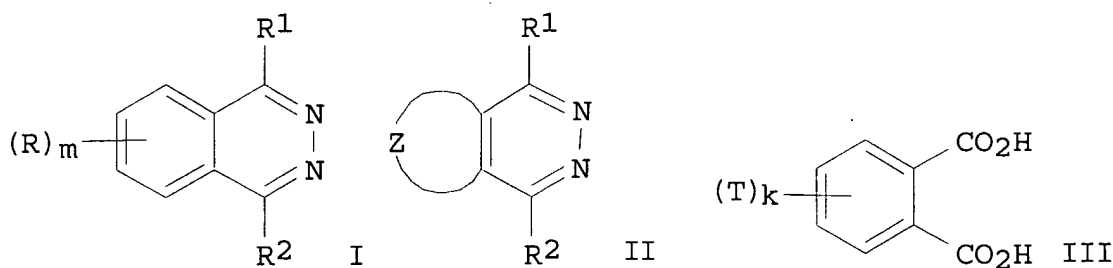
IT 110772-34-4P 274693-63-9P 351388-36-8P **357269-52-4P**  
(**crosslinked**; **UV-crosslinkable**  
pressure-sensitive adhesive compns. contg. styrene-acrylic block  
copolymers)

IT 3584-23-4, TAZ 104  
(photoinitiator; **UV-crosslinkable**  
pressure-sensitive adhesive compns. contg. styrene-acrylic block  
copolymers)

IT 189324-13-8P, 2-Hydroxyethyl 2-bromo-2-methylpropionate  
(**polymn.** initiator; **UV-crosslinkable**  
pressure-sensitive adhesive compns. contg. styrene-acrylic block  
copolymers)

L27 ANSWER 3 OF 28 HCA COPYRIGHT 2002 ACS  
135:160180 Photothermographic material. Kudo, Shinji; Chigusa, Keiko;  
Kashiwagi, Hiroshi (Konica Corp., Japan). Eur. Pat. Appl. EP  
1122593 A2 20010808, 76 pp. DESIGNATED STATES: R: AT, BE, CH, DE,  
DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI,  
RO. (English). CODEN: EPXXDW. APPLICATION: EP 2001-100974  
20010117. PRIORITY: JP 2000-11733 20000120; JP 2000-28875 20000207;  
JP 2000-70296 20000314.

GI



AB A photothermog. material is disclosed, comprising a **light-sensitive** silver halide, an org. silver salt, a reducing agent, a thiuronium salt and a binder, wherein the photothermog. material further contains at least one of compds. represented by I, II and III (R,T = univalent substituent; m,k = 1-4; R1,2 = H or univalent substituent; Z = non-metallic atom group necessary to form an arom. heterocyclic 5-membered ring).

IT **90865-14-8**, Butyl acrylate-tert-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer  
(latex; Heat-developable photothermog. material having higher contrast and exhibiting enhanced uniformity in image d.)

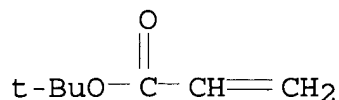
RN 90865-14-8 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 1663-39-4

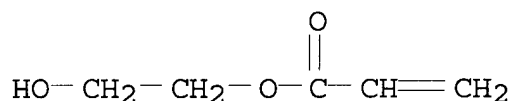
CMF C7 H12 O2



CM 2

CRN 818-61-1

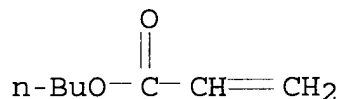
CMF C5 H8 O3



CM 3

CRN 141-32-2

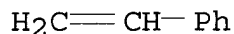
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-498

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

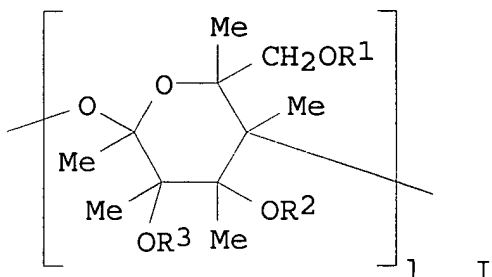
IT **90865-14-8**, Butyl acrylate-tert-butyl acrylate-2-hydroxy ethyl acrylate-styrene copolymer (latex; Heat-developable photothermog. material having higher contrast and exhibiting enhanced uniformity in image d.)

L27 ANSWER 4 OF 28 HCA COPYRIGHT 2002 ACS

135:53560 Heat-developable photographic material with backing layer containing cellulose derivative. Hosoi, Yuji (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2001159801 A2 20010612, 15 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-343233 19991202.

GI





AB In the heat-developable photog. material comprising a support coated with a **photosensitive** layer contg. ~~Ag halide grains,~~ nonphotosensitive reducible org. Ag salt, and a reducing agent for Ag on one side and a backing layer on the other side, the backing layer contains (A) a cellulose deriv. I (R1-3 = H, COCnH2n+1; n = 1-3; 1 = no. for making the mol. wt. 10,000-100,000) as binder and (B) ~~one of an acrylic polymer, a polyurethane, and a polyester.~~ The backing layer, contg. the cellulose deriv. as binder, has glass transition temp. 50-120.degree.. The backing layer shows good adhesion with the substrate, the deterioration of the surface of the material is prevented, and the material shows good antiblocking property.

IT ~~29497-08-3, Butyl acrylate-tert-butyl acrylate-styrene copolymer~~  
(heat-developable photog. material with backing layer contg. cellulose deriv.)

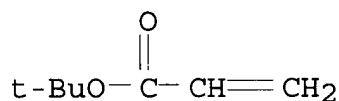
RN 29497-08-3 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

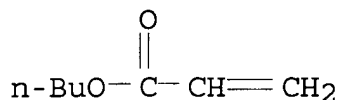
CMF C7 H12 O2



CM 2

CRN 141-32-2

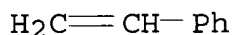
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-498

ICS G03C001-76

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 25586-20-3, Acrylic acid-butyl acrylate-styrene copolymer  
 26899-16-1, Acrylamide-1,3-butadiene-butyl acrylate-styrene  
 copolymer 27136-15-8, Butyl acrylate-methyl methacrylate-styrene  
 copolymer **29497-08-3**, Butyl acrylate-tert-butyl  
 acrylate-styrene copolymer 70634-85-4, 1,3-Butadiene-butyl  
 acrylate-ethyl acrylate copolymer 126465-54-1, Vylon UR 8300  
 137398-78-8, Vylon UR 1200 169277-30-9, Vylon UR 3200  
 181494-10-0, Takelac W 6015 181494-11-1, Takelac XW 76P15  
 (heat-developable photog. material with backing layer contg.  
 cellulose deriv.)

L27 ANSWER 5 OF 28 HCA COPYRIGHT 2002 ACS

134:287940 Photothermographic material and methods for recording and  
 forming images by laser imager or laser image setter. Mitsuhashi,  
 Takeshi (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2001109100  
 A2 20010420, 54 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP  
 1999-288406 19991008.

AB The material coated with at least a nonphotosensitive org. Ag salt  
 and a **photosensitive** Ag halide on a corona-treated  
 support, is characterized by 0.30-1.10 .mu.m av. diam. of org. Ag  
 salt disappearance caused by **photosensitive** Ag halide when  
 exposed by 5-75 .mu.J/cm2 and developed using a drum at  
 123.+-.3.degree. for 16.+-.3 s. The support may be plasma-treated  
 or may have an undercoat layer. The image recording method is  
 characterized by exposing the material by (1) IR laser, (2) a  
 longitudinal multimode laser, or (3) the laser scanner in which an  
 angle between exposed surface and laser beam is within vertical for  
 image recording. The image forming method is characterized by (A)  
 heat-developing the material at 80-250.degree. or (B)  
 heat-developing the material contg. a solvent 5-1000 mg/m2. The  
 material provides images without unevenness and with improved  
 sharpness.

IT **90865-14-8**, Butyl acrylate-tert-butyl acrylate-2-

hydroxyethyl acrylate-styrene copolymer  
(undercoat layer; photothermog. material giving clear image by  
laser exposure)

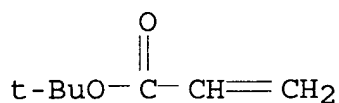
RN 90865-14-8 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl  
2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 1663-39-4

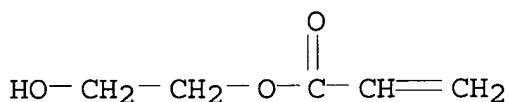
CMF C7 H12 O2



CM 2

CRN 818-61-1

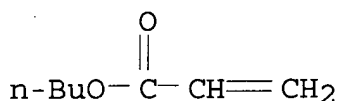
CMF C5 H8 O3



CM 3

CRN 141-32-2

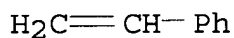
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-498

ICS G03B027-32; G03C005-08; G03D013-00

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and

Other Reprographic Processes)

IT **90865-14-8**, Butyl acrylate-tert-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer  
(undercoat layer; photothermog. material giving clear image by laser exposure)

L27 ANSWER 6 OF 28 HCA COPYRIGHT 2002 ACS

134:170874 Photothermographic material. Hirabayashi, Kazuhiko (Konica Corporation, Japan). Eur. Pat. Appl. EP 1077390 A1 20010221, 95 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 2000-307076 20000818. PRIORITY: JP 1999-232667 19990819.

AB A processing method of a thermog. material is disclosed comprising subjecting the photothermog. material to heat development by the use of a thermal processing app., where the photothermog. material comprises a support, org. silver salt particles, **light-sensitive** silver halide grains, a reducing agent and a contrast-increasing agent; and after having been subjected to heat development, the photothermog. material exhibits a distortion of not more than 0.03.degree.. A thermal processing app. for the thermog. material is also disclosed.

IT **90865-14-8**, Butyl acrylate-tert-butyl acrylate-styrene-2-hydroxyethyl acrylate copolymer  
(subbing coating compn. for photothermog. material contg.)

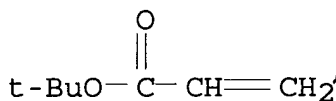
RN 90865-14-8 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 1663-39-4

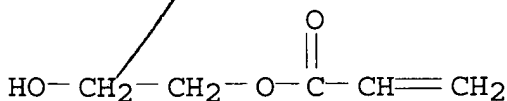
CMF C7 H12 O2



CM 2

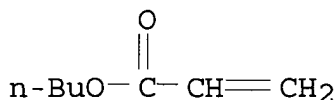
CRN 818-61-1

CMF C5 H8 O3



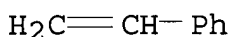
CM 3

CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 100-42-5  
CMF C8 H8



IC ICM G03C001-498  
ICS G03D013-00

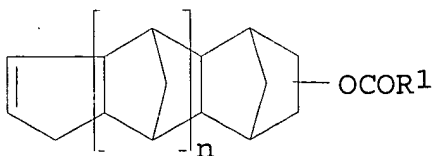
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 47

IT 2271-93-4, Hexamethylene-1,6-bis(ethyleneurea) 9003-53-6,  
Polystyrene 52660-53-4, Butyl acrylate-glycidyl acrylate-styrene  
copolymer **90865-14-8**, Butyl acrylate-tert-butyl  
acrylate-styrene-2-hydroxyethyl acrylate copolymer 120543-34-2,  
Sodium 4-styrenesulfonate-maleic acid copolymer 142648-92-8,  
Styrene-acrylic acid-butyl acrylate-acrylamide-butyl methacrylate  
copolymer  
(subbing coating compn. for photothermog. material contg.)

L27 ANSWER 7 OF 28 HCA COPYRIGHT 2002 ACS

130:259579 Multilayer element for production of lithographic or relief  
printing plates. Blum, Rainer; Philipp, Sabine; Leinenbach, Alfred  
(BASF Drucksysteme G.m.b.H., Germany). Eur. Pat. Appl. EP 907110 A2  
19990407, 7 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR,  
GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO.  
(German). CODEN: EPXXDW. APPLICATION: EP 1998-118395 19980929.  
PRIORITY: DE 1997-19743507 19971001.

GI



I

AB In the title element consisting successively of a layer support, an interlayer and a **photopolymerizable** or **photocrosslinkable** layer, the interlayer contains a copolymer from a monomer (A) represented by a general formula I ( $R_1$  = vinyl, propen-2-yl, 1-butene-2-yl, styryl,  $R_2OCH=CH$ ;  $R_2$  = C2-10-alkyl, aryl, aralkyl, cycloalkyl;  $R_3$  = H, Me, Et;  $n$  = 0-5) or  $R_2OCH=CH$  ( $R_2$  = C2-10-alkyl, aryl, aralkyl, cycloalkyl;  $R_3$  = H, Me, Et) and a copolymerizable monomer (B).

IT 60507-52-0, Acrylic acid-butyl acrylate-tert-butyl acrylate-styrene copolymer  
(in interlayer of multilayer element for prodn. of lithog. or relief printing plates)

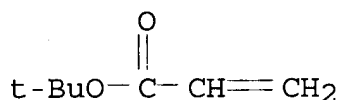
RN 60507-52-0 HCA

CN 2-Propenoic acid, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

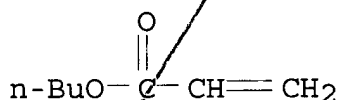
CMF C7 H12 O2



CM 2

CRN 141-32-2

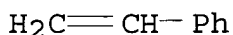
CMF C7 H12 O2



CM 3

CRN 100-42-5

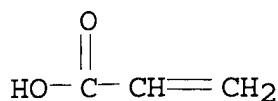
CMF C8 H8



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM G03F007-11  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 IT 27306-39-4, Acrylic acid-butyl acrylate-methyl methacrylate-styrene copolymer **60507-52-0**, Acrylic acid-butyl acrylate-tert-butyl acrylate-styrene copolymer 221552-05-2 (in interlayer of multilayer element for prodn. of lithog. or relief printing plates)

L27 ANSWER 8 OF 28 HCA COPYRIGHT 2002 ACS  
 130:210839 Substrate having a multilayer coating and method for its production. Holzapfel, Klaus; Wonnemann, Heinrich (BASF Coatings A.-G., Germany). PCT Int. Appl. WO 9908808 A1 19990225, 72 pp. DESIGNATED STATES: W: BR, CA, CN, JP, KR, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (German). CODEN: PIXXD2. APPLICATION: WO 1998-EP4688 19980725. PRIORITY: DE 1997-19735540 19970816.

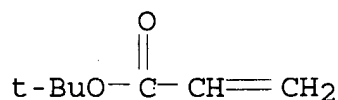
AB Multilayer coatings, useful for car bodies, comprise a powder coating layer prepd. from powders with particle size 30-250 .mu.m that is partially **crosslinkable** by IR **radiation** (e.g. polyester-epoxy resin compns.), a color and(or) effect layer, and a protective top layer. The decorative layer is prepd. from aq. compns. contg. an acrylate resin and(or) a carboxyl-, epoxide-, and(or) OH-contg. resin and a .gtoreq.1 crosslinker selected from isocyanate, aminoplast, and tris(alkoxycarbonylamino)triazine. The use of the partially crosslinkable powder primer eliminates the need for intermediate stoving steps before the final stoving.

IT **220827-63-4P**, Acrylic acid-tert-butyl acrylate-butyl methacrylate-hydroxypropyl methacrylate-styrene copolymer (decorative layer; multilayer coatings having powder primers partially hardenable by IR radiation for car bodies)

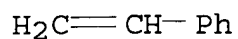
RN 220827-63-4 HCA  
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate, ethenylbenzene, 1,2-propanediol mono(2-methyl-2-propenoate) and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

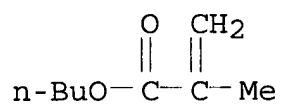
CRN 1663-39-4  
 CMF C7 H12 O2



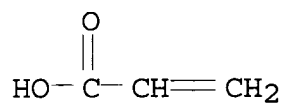
CM 2

CRN 100-42-5  
CMF C8 H8

CM 3

CRN 97-88-1  
CMF C8 H14 O2

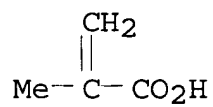
CM 4

CRN 79-10-7  
CMF C3 H4 O2

CM 5

CRN 27813-02-1  
CMF C7 H12 O3  
CCI IDS  
CDES 8:ID

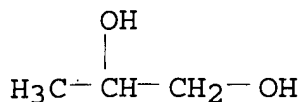
CM 6

CRN 79-41-4  
CMF C4 H6 O2

CM 7



CRN 57-55-6  
CMF C3 H8 O2



IC ICM B05D007-00  
CC 42-3 (Coatings, Inks, and Related Products)  
IT 55567-80-1P, Butyl methacrylate-glycidyl methacrylate-methyl methacrylate-styrene copolymer 220788-74-9P, Acrylic acid-butyl methacrylate-cyclohexyl methacrylate-4-hydroxybutyl acrylate-styrene copolymer 220825-94-5P, 1,4-Dimethylolcyclohexane-hexahydrophthalic anhydride-1,6-hexanediol-trimethylolpropane copolymer ester with 3,3,5(3,5,5)-trimethylhexanoic acid **220827-63-4P**, Acrylic acid-tert-butyl acrylate-butyl methacrylate-hydroxypropyl methacrylate-styrene copolymer (decorative layer; multilayer coatings having powder primers partially hardenable by IR radiation for car bodies)

L27 ANSWER 9 OF 28 HCA COPYRIGHT 2002 ACS  
129:267859 Silver halide photographic material comprising subbing layer having glass transition temperature of 40-200.degree.. Arai, Takeo (Konica Corp., Japan). Eur. Pat. Appl. EP 866366 A1 19980923, 43 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1998-302107 19980320. PRIORITY: JP 1997-67991 19970321.

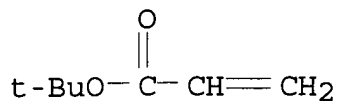
AB A silver halide photog. material comprises a support having thereon a subbing layer having a glass transition temp. of 40-200.degree. and comprising a hydrophobic resin, a silver halide emulsion layer, and optionally a non-**light-sensitive** hydrophilic colloid layer provided on the subbing layer, wherein at least one of the silver halide emulsion layer and the non-**light-sensitive** hydrophilic colloid layer contains inorg. colloidal particles or a composite latex comprising inorg. particles and a hydrophobic resin in an amt. of 0.1-2.0 g/m<sup>2</sup>.

IT **90865-14-8**, Butyl acrylate-tert-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer (silver halide photog. films with subbing layers contg.)

RN 90865-14-8 HCA  
CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

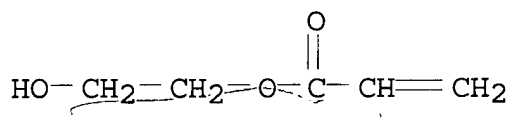
CRN 1663-39-4  
CMF C7 H12 O2



CM 2

CRN 818-61-1

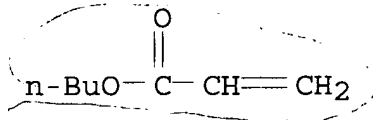
CMF C5 H8 O3



CM 3

CRN 141-32-2

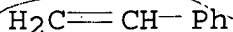
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-93

ICS G03C001-95; G03C001-053

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 26374-92-5, Glycidyl acrylate-styrene copolymer 52660-53-4, Butyl acrylate-glycidyl acrylate-styrene copolymer 90865-14-8, Butyl acrylate-tert-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer

(silver halide photog. films with subbing layers contg.)

L27 ANSWER 10 OF 28 HCA COPYRIGHT 2002 ACS

128:250647 Silver halide photographic material with superior antistatic property and stable interlayer adhesion and thermal resistance.

Tsuji, Nobuaki (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP

10069029 A2 19980310 Heisei, 12 pp. (Japanese). CODEN: JKXXAF.

APPLICATION: JP 1996-225203 19960827.

AB The material comprises .gtoreq.2 hydrophilic colloid layer including a **light-sensitive** Ag halide emulsion layer and a subbing layer between the colloid layer and the support on .gtoreq.1 side of it, in which (a) the subbing layer contains an elec. conductive metal oxide and (b) the subbing layer and a light-insensitive hydrophilic colloid layer adjacent to the layer contain a latex with glass-transition temp. of 0-90.degree.. The material shows a superior antistatic property and a stable interlayer adhesion and heat resistance.

IT **90885-27-1**, Butyl acrylate-tert-butyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer (latex; in photog. film having antistatic subbing layer contg. elec. conductive metal oxide showing good interlayer adhesive strength and heat resistance)

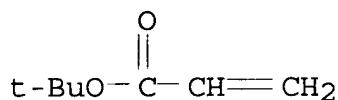
RN 90885-27-1 HCA

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

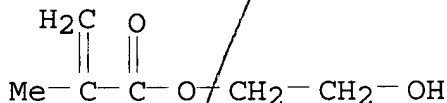
CMF C7 H12 O2



CM 2

CRN 868-77-9

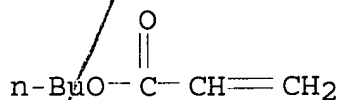
CMF C6 H10 O3



CM 3

CRN 141-32-2

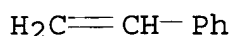
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-85

ICS G03C001-91; G03C001-93

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **90885-27-1**, Butyl acrylate-tert-butyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer 161717-07-3, Cyclohexyl methacrylate-glycidyl methacrylate-isononyl acrylate copolymer 205115-50-0  
(latex; in photog. film having antistatic subbing layer contg. elec. conductive metal oxide showing good interlayer adhesive strength and heat resistance)

L27 ANSWER 11 OF 28 HCA COPYRIGHT 2002 ACS

127:360034 Nonyellowing polyurethane coating compositions. Suzuki, Ryuichi; Tomita, Shinji; Sukejima, Hajime (Kansai Paint Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09279092 A2 19971028 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-93766 19960416.

AB Title compns. contain OH-contg. polymers, polyisocyanates, Zn octanoate (I) as the curing catalyst, and oxalanilide (II) as the UV absorber. A compn. (A) comprising I 0.2, II 1.0, Duranate TPA 10017.3, and acrylic acid-iso-Bu acrylate-tert-Bu methacrylate-2-ethylhexyl acrylate-2-hydroxyethyl acrylate-Me methacrylate-styrene copolymer 100 parts was dild. and sprayed on a car panel to form a 40-.mu.m film showing good dryness (20.degree. for 20 min, 60.degree. for 1 h, and 20.degree., 75% relative humidity for 2 h) and nonyellowing after 103 h under sunshine weatherometer. The above Duranate TPA 100-free A compn. showed nonyellowing after 1 mo at 40.degree..

IT **198490-70-9P**

(zinc octanoate **catalyst**- and oxalanilide **UV** absorber-contg. polyurethane coatings with yellowing prevention)

RN 198490-70-9 HCA

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with Duranate TPA 100, ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-methylpropyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 134498-50-3

CMF Unspecified

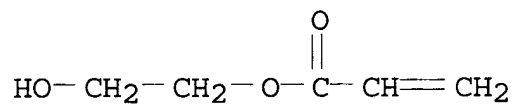
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 818-61-1

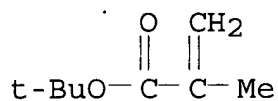
CMF C5 H8 O3



CM 3

CRN 585-07-9

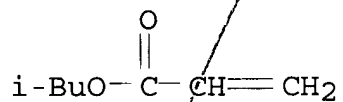
CMF C8 H14 O2



CM 4

CRN 106-63-8

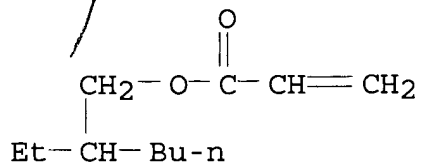
CMF C7 H12 O2



CM 5

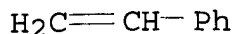
CRN 103-11-7

CMF C11 H20 O2



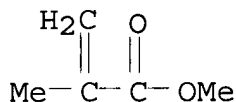
CM 6

CRN 100-42-5  
CMF C8 H8



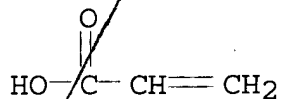
CM 7

CRN 80-62-6  
CMF C5 H8 O2



CM 8

CRN 79-10-7  
CMF C3 H4 O2



- IC ICM C09D175-04  
ICS C09D175-04; C08G018-22
- CC 42-10 (Coatings, Inks, and Related Products)
- IT Polyurethanes, uses  
(acrylic; zinc octanoate **catalyst**- and oxalanilide **UV** absorber-contg. polyurethane coatings with yellowing prevention)
- IT Acrylic polymers, uses  
(polyurethane-; zinc octanoate **catalyst**- and oxalanilide **UV** absorber-contg. polyurethane coatings with yellowing prevention)
- IT Coating materials  
(weather-resistant; zinc octanoate **catalyst**- and oxalanilide **UV** absorber-contg. polyurethane coatings with yellowing prevention)
- IT Absorbents  
(zinc octanoate **catalyst**- and oxalanilide **UV** absorber-contg. polyurethane coatings with yellowing prevention)
- IT 557-09-5, Zinc octanoate  
(zinc octanoate **catalyst**- and oxalanilide **UV** absorber-contg. polyurethane coatings with yellowing prevention)
- IT 198490-70-9P  
(zinc octanoate **catalyst**- and oxalanilide **UV** absorber-contg. polyurethane coatings with yellowing prevention)

IT 620-81-5, Oxalanilide  
(zinc octanoate **catalyst**- and oxalanilide **UV**  
absorber-contg. polyurethane coatings with yellowing prevention)

L27 ANSWER 12 OF 28 HCA COPYRIGHT 2002 ACS

127:59084 Electrically conductive film and **photosensitive**  
material using it. Sasaki, Kamiyuki; Ezure, Hidetoshi; Kurachi,  
Ikuo (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 09109343 A2  
19970428 Heisei, 24 pp. (Japanese). CODEN: JKXXAF. APPLICATION:  
JP 1995-268534 19951017.

AB The film comprises a polyester film successively coated with  
.gtoreq.1 elec. conductive layer contg. 10-70 vol% (based on a  
binder) elec. conductive inorg. particles and .gtoreq.1 polymer  
coating layer with surface hardness (HD) .gtoreq.15. The  
**photosensitive** material comprises the above film coated with  
a.gtoreq.1 **photosensitive** layer. The film showed improved  
scratching resistance.

IT **90865-14-8P**, Butyl acrylate-tert-butyl acrylate-2-  
hydroxyethyl acrylate-styrene copolymer  
(binder; **photosensitive** material using elec. conductive  
film with improved scratching resistance)

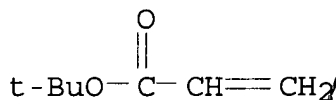
RN 90865-14-8 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl  
2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 1663-39-4

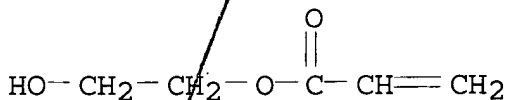
CMF C7 H12 O2



CM 2

CRN 818-61-1

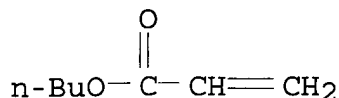
CMF C5 H8 O3



CM 3

CRN 141-32-2

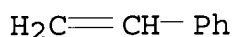
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



- IC ICM B32B027-36  
ICS B32B007-02; B32B027-18; G03C001-795; G03C001-85
- CC 76-2 (Electric Phenomena)  
Section cross-reference(s): 74
- ST elec conductor film scratching resistance; **photosensitive**  
material elec conductive film substrate; hard polymer coating elec  
conductor film
- IT Optical filters  
(color filters from **photosensitive** material using elec.  
conductive film with improved scratching resistance)
- IT Electric conductors  
Photographic films  
Printing plates  
(**photosensitive** material using elec. conductive film  
with improved scratching resistance)
- IT Polyesters, uses  
(**photosensitive** material using elec. conductive film  
with improved scratching resistance)
- IT Polyesters, uses  
(substrate; **photosensitive** material using elec.  
conductive film with improved scratching resistance)
- IT **90865-14-8P**, Butyl acrylate-tert-butyl acrylate-2-  
hydroxyethyl acrylate-styrene copolymer 165895-30-7P,  
Acrylamide-butyl methacrylate-glycidyl methacrylate-styrene  
copolymer  
(binder; **photosensitive** material using elec. conductive  
film with improved scratching resistance)
- IT 7727-43-7, Barium sulfate  
(**photosensitive** material using elec. conductive film  
with improved scratching resistance)
- IT 1332-29-2P, Tin oxide 12673-86-8P, Antimony tin oxide  
18282-10-5P, Tin oxide (SnO<sub>2</sub>) 190714-60-4P, 1,4-  
Cyclohexanedicarboxylic acid-1,4-cyclohexanedimethanol-dimethyl  
terephthalate-ethylene glycol-dimethyl 5-sodiosulfoisophthalate  
copolymer  
(**photosensitive** material using elec. conductive film  
with improved scratching resistance)



IT 25038-59-9, Poly(ethylene terephthalate), uses  
(substrate; **photosensitive** material using elec.  
conductive film with improved scratching resistance)

L27 ANSWER 13 OF 28 HCA COPYRIGHT 2002 ACS

127:51559 Thermosetting or **photocurable** resin compositions  
with good light shielding, dispersibility, and water or alkali  
developability. Hirayama, Takayuki; Sato, Haruyoshi; Otsuki,  
Hiroshi; Ando, Masayuki (Nippon Oil Co., Ltd., Japan; Dainippon  
Printing Co., Ltd.). Jpn. Kokai Tokkyo Koho JP 09124954 A2 19970513  
Heisei, 15 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP  
1995-287592 19951106.

AB The title compns. useful in light shielding films for color filters  
for liq. crystal displays contain carbon materials obtained by a  
carbon-contg. material with polymers having .gtoreq.1 reactive  
groups chosen from aziridine, oxazoline, N-hydroxyalkylamide, epoxy,  
thioepoxy, isocyanato, hydroxy, amino, vinyl and (meth)acrylic  
groups and also alkoxy carbonyl group R1R2R3COCO group (R1-3 H, C1-6  
alkyl, C5-8 cycloalkyl, C6-16 aryl, at least two of R1-3 being org.  
groups) and thermosetting resin or **photocurable** compds.  
Carbon black was treated with an iso-Bu acrylate-Bu acrylate-Me  
methacrylate-tert-Bu acrylate-glycidyl methacrylate copolymer by  
kneading in iso-Pr alc., washed with diethylene glycol di-Me ether,  
stirred with 3N HCl at 80.degree. for 1 h, concd. in vacuo at  
60.degree., and used in making black matrix together with carboxy  
and hydroxy group-contg. acrylic resin, Aron S-4030, M-66B, and Et  
Cellosolve acetate.

IT 191015-08-4P

(thermosetting or **photocurable** resin compns. with good  
light shielding, dispersibility, and water or alkali  
developability)

RN 191015-08-4 HCA

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
2-propenoate, 4,5-dihydro-2-(1-methylethenyl)oxazole,  
1,1-dimethylethyl 2-propenoate, ethenylbenzene, 2-methylpropyl  
2-methyl-2-propenoate and .alpha.-(1-oxo-2-propenyl)-.omega.-  
(nonylphenoxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

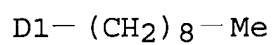
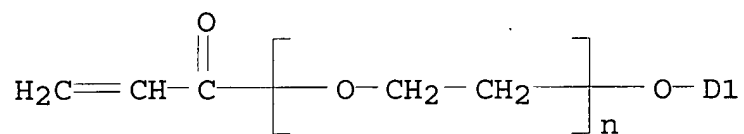
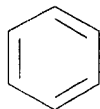
CM 1

CRN 50974-47-5

CMF (C2 H4 O)n C18 H26 O2

CCI IDS, PMS

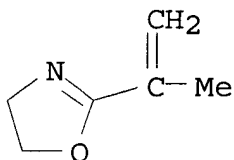
CDES 8:ID



CM 2

CRN 10471-78-0

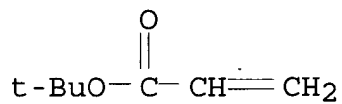
CMF C6 H9 N O



CM 3

CRN 1663-39-4

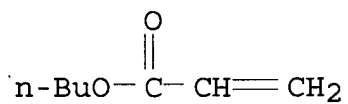
CMF C7 H12 O2



CM 4

CRN 141-32-2

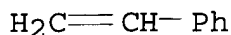
CMF C7 H12 O2



CM 5

CRN 100-42-5

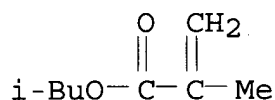
CMF C8 H8



CM 6

CRN 97-86-9

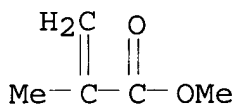
CMF C8 H14 O2



CM 7

CRN 80-62-6

CMF C5 H8 O2



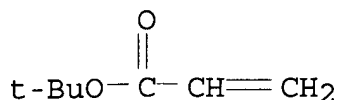
- IC ICM C08L101-00  
ICS C09C001-56; G03F007-027; G03F007-038; G02B005-00; G02B005-20
- CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 73, 74, 76
- ST black matrix color filter carbon black; acrylic polymer treated carbon black; thermosetting resin light shield; **photocurable** resin light shield
- IT Epoxy resins, preparation  
(acrylates; thermosetting or **photocurable** resin compns. with good light shielding, dispersibility, and water or alkali developability)
- IT Optical filters  
(thermosetting or **photocurable** resin compns. with good light shielding, dispersibility, and water or alkali developability)
- IT Aminoplasts  
(thermosetting or **photocurable** resin compns. with good light shielding, dispersibility, and water or alkali developability)
- IT Carbon black, uses  
(thermosetting or **photocurable** resin compns. with good

- light shielding, dispersibility, and water or alkali developability)
- IT 27103-66-8DP, AK 601, epoxy resin derivs. 29570-58-9DP, Dipentaerythritol hexaacrylate, epoxy resin derivs. 159131-95-0DP, Kayarad R5198, epoxy resin derivs. 187146-70-9P  
**191015-08-4P** 191015-09-5P 191015-10-8P  
 (thermosetting or **photocurable** resin compns. with good light shielding, dispersibility, and water or alkali developability)
- IT 9003-08-1, Melamine resin  
 (thermosetting or **photocurable** resin compns. with good light shielding, dispersibility, and water or alkali developability)
- IT 19706-80-0, 2,2'-Azobis(2-cyanopropanol)  
 (thermosetting or **photocurable** resin compns. with good light shielding, dispersibility, and water or alkali developability)
- L27 ANSWER 14 OF 28 HCA COPYRIGHT 2002 ACS
- 126:124711 Polyester-based support for silver halide photography. Yajima, Takatoshi; Takada, Masato; Ishii, Masami; Pponda, Makoto (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 08248564 A2 19960927 Heisei, 44 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-48476 19950308.
- AB The photog. support comprises (a) a film mainly composed of a polyester contg. naphthalenedicarboxylic acid (I) as a dicarboxylic acid and exhibiting IR absorption 0.90.ltoreq. I1133/I1142 .ltoreq.1.05 and 0.90.ltoreq. I1330/I1340 .ltoreq.1.10 (I1133, I1142, I1330, and I1340 = IR absorption at 1133, 1142, 1330, 1340, and 1340 cm<sup>-1</sup>) and (b) a primer layer mainly composed of a water-sol. polymer having a functional group, preferably a vinyl copolymer latex or a water-sol. copolyester, more preferably, poly(ethylene 2,6-naphthalate). The polyester may have a laminar structure comprising the I-contg. polyester as exteriors on both sides and .gtoreq.1 an inside layer of a modified polyester. The modified polyester may contain a metal sulfonate arom. dicarboxylic acid and/or polyethylene glycol. The photog. support shows good mech. strength, adhesion to a **photosensitive** layer, transparency, and dimensional stability and is esp. suitable for a small camera.
- IT **90885-27-1P**  
 (primer; Ag halide photog. polyester-based support for small camera)
- RN 90885-27-1 HCA
- CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

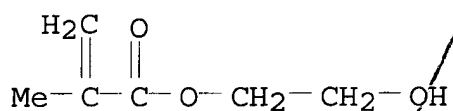
CMF C7 H12 O2



CM 2

CRN 868-77-9

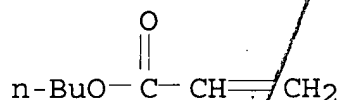
CMF C6 H10 O3



CM 3

CRN 141-32-2

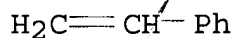
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-795

ICS G03C001-81; G03C001-91

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 90885-27-1P 186152-85-2P 186152-89-6P 186152-90-9P

186152-91-0P 186152-92-1P 186152-93-2P

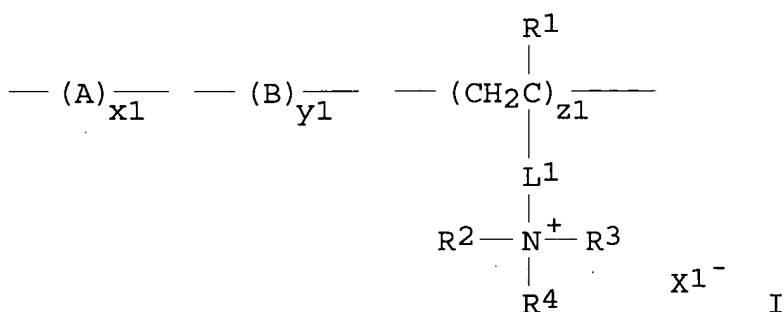
(primer; Ag halide photog. polyester-based support for small camera)

L27 ANSWER 15 OF 28 HCA COPYRIGHT 2002 ACS

123:70204 Silver halide photographic film. Saito, Koichi; Ito, Mineko; Tachibana, Noriki (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 07077777 A2 19950320 Heisei, 46 pp. (Japanese). CODEN:

JKXXAF. APPLICATION: JP 1994-57498 19940328. PRIORITY: JP 1993-175557 19930715.

GI



AB In the title photog. film having .gtoreq.1 **photosensitive** Ag halide emulsion layer on one side of a support, one side of the support has a subbing layer comprising an addn. polymer-based latex contg. a functional group, and a layer adjacent to the subbing layer contains sp. compds. such as I (R1 = H, lower alkyl; R2-4 = alkyl, aralkyl, alkenyl, allyl; L1 = divalent group; X1 = anion; x1 (0-20), y1 (0-70), z1 (30-100) = mol fraction; A, B = copolymerizable unsatd. ethylenic group). The photog. film exhibited excellent optical transmissivity, adhesivity, an antistatic property.

IT **90865-14-8**, Butyl acrylate-tert-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer  
(subbing layer of silver halide photog. film)

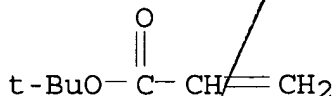
RN 90865-14-8 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 1663-39-4

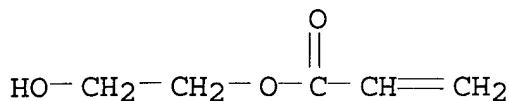
CMF C7 H12 O2



CM 2

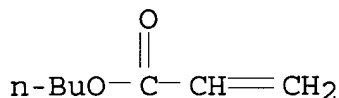
CRN 818-61-1

CMF C5 H8 O3



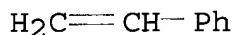
CM 3

CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 100-42-5  
CMF C8 H8



- IC ICM G03C001-85  
ICS C08G063-189; C08G063-688; G03C001-00; G03C001-795; G03C001-93  
ICA B32B027-36  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
IT **90865-14-8**, Butyl acrylate-tert-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer (subbing layer of silver halide photog. film)
- L27 ANSWER 16 OF 28 HCA COPYRIGHT 2002 ACS  
122:302926 Silver halide photographic material. Tsukada, Kazuya (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 07028180 A2 19950131 Heisei, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-171755 19930712.
- AB The title photog. materials, comprising a support coated with .gtoreq.1 Ag halide emulsion layer contg. plate-like Ag halide grains with aspect ratio .gtoreq.3 and .gtoreq.1 non-**photosensitive** hydrophilic colloid layer, contain a polymer latex in the emulsion layer and/or the colloid layer, and the glass transition temp. (Tg.degree.) of the latex and the development temp. (D.degree.) and fixing temp. (F.degree.) upon processing satisfy the relations, Tg .gtoreq. D and Tg .gtoreq. F. The materials show good stability in processing upon rapid processing, stable image d. after development, and improved abrasion resistance and prevent roller marks. Thus, a PET support with an undercoat layer was coated with a Ag(I, B) (aspect ratio 3.5) emulsion layer contg. isononyl

acrylate-cyclohexyl methacrylate-glycidyl methacrylate copolymer latex (Tg 41.degree.) and a gelatin-based protective layer to give a photog. film, which was exposed with x-ray, developed at 35.degree., and fixed at 33.degree..

IT 29497-08-3  
(photog. film contg. tabular silver halide grains and polymer latex)

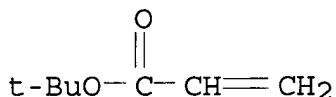
RN 29497-08-3 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

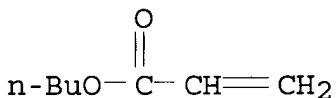
CMF C7 H12 O2



CM 2

CRN 141-32-2

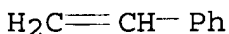
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-04

ICS G03C001-035

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 9003-05-8, Polyacrylamide 26428-43-3, Butyl acrylate-glycidyl methacrylate-styrene copolymer 29497-08-3 161420-57-1  
161717-07-3 163186-85-4

(photog. film contg. tabular silver halide grains and polymer latex)



122:174256 Silver halide photographic materials containing polymer latex to improve physical properties. Taguchi, Masaaki (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 06308651 A2 19941104 Heisei, 20 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-99561 19930426.

AB The claimed photog. materials having a **light-sensitive** layer on a support contains a polymer latex in the amt. of 10-70 wt.% of total binder to provide the photog. layer with a .gtoreq.20 min melting time. Also claimed is the latex comprising a monomer having the soly. to H2O of .ltoreq.0.025 wt.%. The coating wt. of the total binder is preferably .ltoreq.5.5 g/m2. The latex improves the phys. properties of the material, and reduces roller marks, non-uniform development d. when machine processed. It also improves the photog. speed.

IT 29497-08-3P

(photog. material contg. polymer latex for roller mark and scratch prevention)

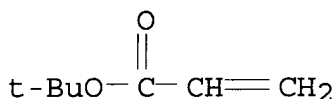
RN 29497-08-3 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

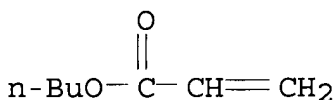
CMF C7 H12 O2



CM 2

CRN 141-32-2

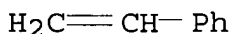
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-04

ICS G03C001-053

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 25212-88-8P, Ethyl acrylate-methacrylic acid copolymer  
29497-08-3P

(photog. material contg. polymer latex for roller mark and scratch prevention)

L27 ANSWER 18 OF 28 HCA COPYRIGHT 2002 ACS

121:121802 Thermal-transfer photothermographic copying method. Tsucha, Masaru; Oohayashi, Keiji (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 05297545 A2 19931112 Heisei, 36 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-96299 19920416.

AB In the title method in which a photothermog. material having on a support .gtoreq.1 **photosensitive** layer(s) contg. a **photosensitive** Ag halide emulsion, a dye-providing substance which releases or forms a diffusible dye during heat development, and a hydrophilic binder and on the side of the support opposite to the **photosensitive** layer .gtoreq.1 nonphotosensitive layer(s) contg. a hydrophilic binder is imagewise exposed and heat developed at 70-200.degree. to release or form a diffusible dye(s) and the released or formed dye is transferred under heat to a sep. receptor having a dye image-receiving material, .gtoreq.1 of the **photosensitive** layer and nonphotosensitive layer contains polymer latex grains >0.6 wt. ratio relative to the hydrophilic binder and the dye image-receiving material contains a heat-developing solvent. The invention improves the peelability of the receptor from the **photosensitive** material after thermal transfer, the transferability of dye images, and the film strength of the **photosensitive** material.

IT 90885-27-1, Butyl acrylate-2-hydroxyethyl methacrylate-tert-butyl acrylate-styrene copolymer (latex, photothermog. material contg.)

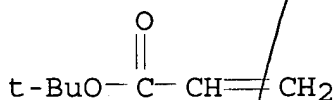
RN 90885-27-1 HCA

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

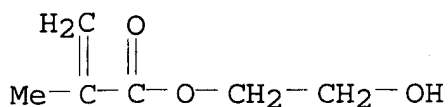
CMF C7 H12 O2



CM 2

CRN 868-77-9

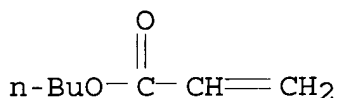
CMF C6 H10 O3



CM 3

CRN 141-32-2

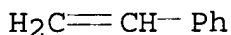
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C008-40

ICS G03C001-498; G03C005-00; G03C008-40

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

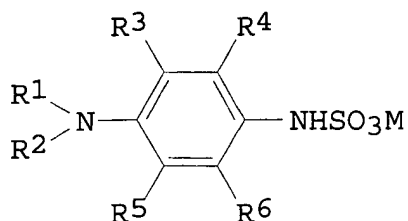
ST photothermog copying thermal transfer; polymer latex photothermog **photosensitive** material; heat developing solvent photothermog receptorIT 9003-53-6, Polystyrene 9010-87-1, Ethyl acrylate-methyl acrylate copolymer 26589-39-9, Methacrylic acid-methyl acrylate copolymer 26916-03-0, Butyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer **90885-27-1**, Butyl acrylate-2-hydroxyethyl methacrylate-tert-butyl acrylate-styrene copolymer 124327-27-1 157014-92-1

(latex, photothermog. material contg.)

L27 ANSWER 19 OF 28 HCA COPYRIGHT 2002 ACS

121:95809 Heat-developable silver halide photographic material and image formation using same. Oohayashi, Keiji (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 05241305 A2 19930921 Heisei, 46 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-39674 19920226.

GI



AB In the title photog. material comprising, on a support, a hydrophilic binder, a **photosensitive** Ag halide, a diffusion-resistant coupler capable of producing diffusive dye on heat-development, and a color developer precursor p-phenylenediamine, the photog. material contains a multivalent metal ion 0.1-10 mmol/m<sup>2</sup>(photog. material) and hydrophobic org. compds. (water soly. .ltoreq. 0.1 g/L at a normal temp.) of total wt. ratio .gtoreq. 1.2 relative to the hydrophilic binder; the p-phenylenediamine having formula I [R1, R2 = C1-8 alkyl; R1 may joint with R2 to form a heterocyclic ring; R3-6 = H, halo, alkyl, alkoxy, acylamino, arylsulfonylamino, alkylsulfonylamino; at least 1 of R1-R6 is OH, NHCOR7(R7 = C1-3 alkyl), CONHR8(R8 = H, C1-3 alkyl), SO2NH2, NHSO2CH3, or substituent contg. those groups; M = H, alkali metal, NH4, N-contg. org. base, compd. contg. quaternary N]. In the formation of images by imagewise exposing the above photog. material, thermally developing to form dye, and contacting it with a dye acceptor material to thermally transfer the diffusion dye, the photog. material and dye acceptor material contain a hot-solvent which is solid at a normal temp. The invention can suppress residual developer-caused stains and transfer unevenness.

IT 156349-87-0, n-Butyl acrylate-tert-butyl acrylate-hydroxymethyl methacrylate-styrene copolymer (latex, heat-developable photog. material using)

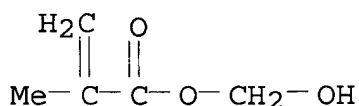
RN 156349-87-0 HCA

CN 2-Propenoic acid, 2-methyl-, hydroxymethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

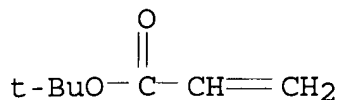
CRN 21982-30-9

CMF C5 H8 O3



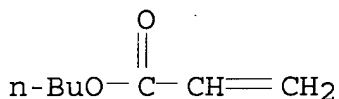
CM 2

CRN 1663-39-4  
CMF C7 H12 O2



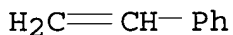
CM 3

CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 100-42-5  
CMF C8 H8



- IC ICM G03C008-40  
ICS G03C001-498; G03C001-73; G03C005-00; G03C007-32
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- IT **156349-87-0**, n-Butyl acrylate-tert-butyl acrylate-hydroxymethyl methacrylate-styrene copolymer (latex, heat-developable photog. material using)
- L27 ANSWER 20 OF 28 HCA COPYRIGHT 2002 ACS  
120:301212 Two-package coating composition comprising a polycarbodimide with improved rheology control. Serdiuk, Paul; Birdwhistell, Kurt (BASF Corp., USA). U.S. ~~US 5276096~~ A 19940104, 8 pp. Cont. of U.S. Ser. No. 751,042, abandoned. (English). CODEN: USXXAM.  
APPLICATION: US 1992-946002 19920915. PRIORITY: US 1991-751042 19910828.
- AB Title clear compns., having improved rheol. control and giving films with excellent appearance and sag resistance, comprise (A) acrylic resins having acid and hydroxy groups, org. solvents, and additives (i.e. **UV**-stabilizers, antioxidants, **catalysts**, flow agents, hindered amine light stabilizers and their mixts.) and (B) polycarbodiimides, org. solvents, additives as above, and optionally crosslinkers selected from polyisocyanates, aminoplasts, and their mixts. A clear compn. contg. 95.8 parts acrylic acid-Bu acrylate-Bu methacrylate-hydroxyethyl acrylate-styrene copolymer,

4.2 parts XL 20 (a polycarbodiimide), Cymel 303, and additives was sprayed on a blue metallic compn.-coated plate to form a smooth film with sag length at film build of 1.4 mils 5, vs. 12, for a similar compn. without the polycarbodiimide.

IT 154815-64-2 154815-65-3

(clear coatings, contg. polycarbodiimides, with rheol. control, antisagging, smooth)

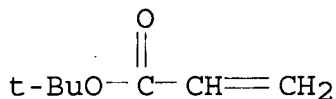
RN 154815-64-2 HCA

CN 2-Propenoic acid, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 1663-39-4

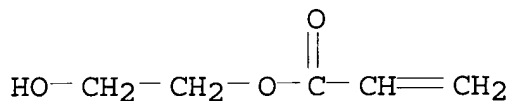
CMF C7 H12 O2



CM 2

CRN 818-61-1

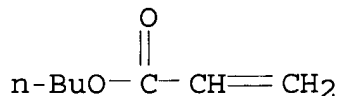
CMF C5 H8 O3



CM 3

CRN 141-32-2

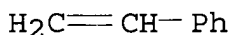
CMF C7 H12 O2



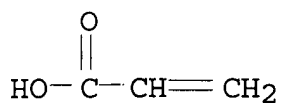
CM 4

CRN 100-42-5

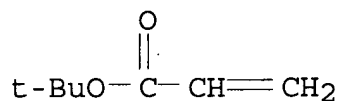
CMF C8 H8



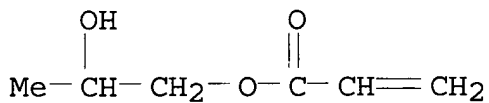
CM 5

CRN 79-10-7  
CMF C3 H4 O2RN 154815-65-3 HCA  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
2-propenoate, 1,1-dimethylethyl 2-propenoate, ethenylbenzene,  
2-hydroxypropyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX  
NAME)

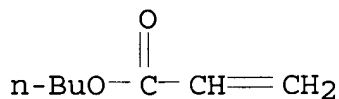
CM 1

CRN 1663-39-4  
CMF C7 H12 O2

CM 2

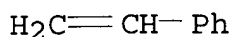
CRN 999-61-1  
CMF C6 H10 O3

CM 3

CRN 141-32-2  
CMF C7 H12 O2

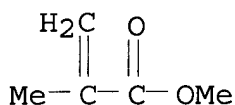
CM 4

CRN 100-42-5  
CMF C8 H8



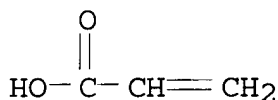
CM 5

CRN 80-62-6  
CMF C5 H8 O2



CM 6

CRN 79-10-7  
CMF C3 H4 O2



IC ICM C08F008-30  
ICS C08F283-04

NCL 525123000

CC 42-5 (Coatings, Inks, and Related Products)

IT 68123-57-9 151484-60-5 154815-63-1 **154815-64-2**  
**154815-65-3** 154815-66-4

(clear coatings, contg. polycarbodiimides, with rheol. control, antisagging, smooth)

L27 ANSWER 21 OF 28 HCA COPYRIGHT 2002 ACS

118:112854 Silver halide photographic material of high image quality.  
Tsukada, Kazuya (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP  
04107449 A2 19920408 Heisei, 26 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1990-226972 19900828.

AB A Ag halide photog. material possesses .gtoreq.1  
**photosensitive** emulsion layer and an antistatic layer  
consisting of a reaction product of a H2O-sol. conductive polymer,  
hydrophobic polymer particles, and hardening agents on .gtoreq.1  
side of a support, and also contains a high b.p. solvent having b.p.  
.gtoreq.150.degree. in the antistatic layer, the emulsion layer, or  
other hydrophilic colloid layer. The photog. material provides high  
sensitivity, high antistatic property, and pressure resistance (i.e.  
little pressure fog) in a processing liq. during rapid development.



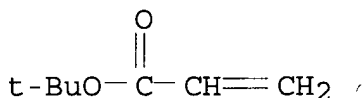
IT 29497-08-3 90885-27-1  
(photog. material with pressure-resistant antistatic layer  
contg.)

RN 29497-08-3 HCA  
CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl  
2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

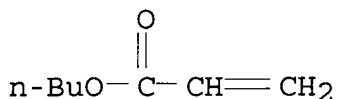
CMF C7 H12 O2



CM 2

CRN 141-32-2

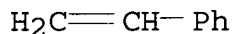
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8

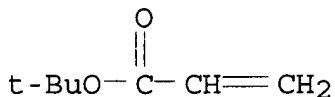


RN 90885-27-1 HCA  
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with  
butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and  
ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

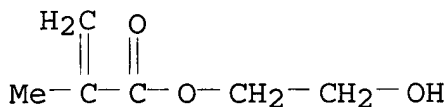
CMF C7 H12 O2



CM 2

CRN 868-77-9

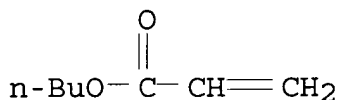
CMF C6 H10 O3



CM 3

CRN 141-32-2

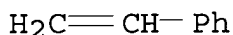
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-89

ICS G03C001-04; G03C001-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 116-25-6 14516-34-8 27083-51-8 27816-23-5 **29497-08-3**52234-82-9 **90885-27-1** 96361-50-1 121366-89-0

129613-59-8 130341-38-7 137188-60-4 137188-61-5 137188-63-7

137188-64-8 137188-65-9 137188-66-0 137188-67-1 137223-16-6

137867-39-1 141634-13-1 141702-81-0 145314-15-4 146122-53-4

(photog. material with pressure-resistant antistatic layer  
contg.)

L27 ANSWER 22 OF 28 HCA COPYRIGHT 2002 ACS

116:95585 Silver halide photographic **light-sensitive**

material. Tsukada, Kazuya (Konica Co., Japan). U.S. US 5013637 A

19910507, 13 pp. (English). CODEN: USXXAM. APPLICATION: US

1990-596776 19901011. PRIORITY: JP 1989-270813 19891018.

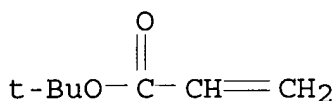
AB The photog. material with improved antistatic properties, comprises a support, a Ag halide emulsion layer, and an antistatic layer comprising a water-sol. conductive polymer, a hydrophobic polymer

IT particle, and a silane coupling agent.  
29497-08-3 90885-27-1  
(antistatic layers contg., for silver halide **light-sensitive** material)  
RN 29497-08-3 HCA  
CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl  
2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

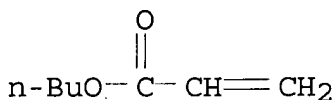
CMF C7 H12 O2



CM 2

CRN 141-32-2

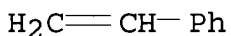
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8

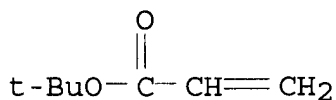


RN 90885-27-1 HCA  
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with  
butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and  
ethenylbenzene (9CI) (CA INDEX NAME)

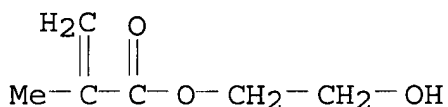
CM 1

CRN 1663-39-4

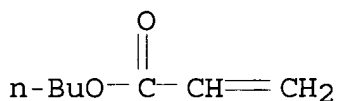
CMF C7 H12 O2



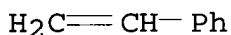
CM 2

CRN 868-77-9  
CMF C6 H10 O3

CM 3

CRN 141-32-2  
CMF C7 H12 O2

CM 4

CRN 100-42-5  
CMF C8 H8

IC ICM G03C001-85

NCL 430527000

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)  
Section cross-reference(s): 38

IT 1760-24-3 2530-83-8 2530-85-0 2530-87-2 2768-02-7  
 4130-08-9 4420-74-0 18270-05-8 26264-85-7 **29497-08-3**  
**90885-27-1** 96361-50-1 129613-59-8 129636-89-1  
 130341-38-7 137188-60-4 137188-66-0 137188-67-1 138918-73-7  
 138918-74-8 138918-75-9 138918-76-0  
 (antistatic layers contg., for silver halide **light-sensitive** material)

L27 ANSWER 23 OF 28 HCA COPYRIGHT 2002 ACS

116:48767 A silver halide photographic **light-sensitive**  
 material. Nagasaki, Satoru; Sakuma, Haruhiko; Hashimoto, Hiroyuki;  
 Tsukada, Kazuya (Konica Co., Japan). Eur. Pat. Appl. EP 424010 A2  
 19910424, 96 pp. DESIGNATED STATES: R: DE, GB, IT. (English).  
 CODEN: EPXXDW. APPLICATION: EP 1990-311067 19901009. PRIORITY: JP

1989-267188 19891014; JP 1989-296446 19891115; JP 1989-321876 19891212.

AB The photog. material comprises an antistatic layer comprising a water-sol. elec. conductive polymer, hydrophobic polymer particles and a hardener; and a hydrophilic colloidal layer contg. a polyhydric alc. The photog. material may further comprise an elec. conductive layer on a Ag halide emulsion layer nearest to the support, and the hydrophobic polymer particle may contain a dye. The photog. material is suitable as an x-ray recording film.

IT 29497-08-3 90885-27-1

(photog. material with antistatic layer contg.)

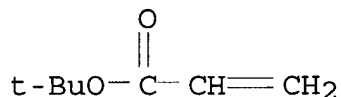
RN 29497-08-3 HCA

CN 2-Propenoic acid, butyl ester, polymer with 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

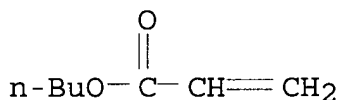
CMF C7 H12 O2



CM 2

CRN 141-32-2

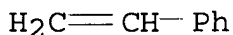
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8

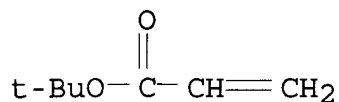


RN 90885-27-1 HCA

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

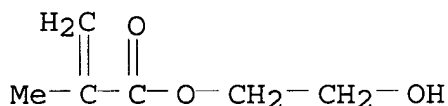
CM 1

CRN 1663-39-4  
CMF C7 H12 O2



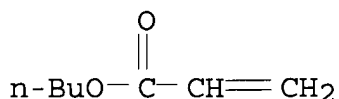
CM 2

CRN 868-77-9  
CMF C6 H10 O3



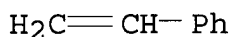
CM 3

CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 100-42-5  
CMF C8 H8



IC ICM G03C001-85  
ICS G03C001-825  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
IT 2271-93-4 6611-01-4 25085-39-6 26264-85-7 26591-47-9  
**29497-08-3** 86801-50-5 88923-86-8 **90885-27-1**  
96361-50-1 129613-59-8 129636-91-5 130341-38-7 134119-91-8  
137188-60-4 137188-61-5 137188-62-6 137188-63-7 137188-64-8  
137188-65-9 137188-66-0 137188-67-1 137223-16-6  
(photog. material with antistatic layer contg.)

115:31235 Weather-resistant acrylic polymer coatings. Nakasaki, Mitsuo; Matsuda, Tatsuto; Yoshida, Masaya; Aoyama, Takahiro; Hashiguchi, Shoji (Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 03024171 A2 19910201 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1989-158831 19890621.

AB Title soln. or dispersion coatings contain aminoplasts and polymers prepd. from **polymerizable UV** stabilizers, cycloalkyl-contg. monomers, and OH-contg. monomers. Thus, a soln. contg. Super-Beckamine 47-508-60 and 4-methacryloyloxy-1,2,2,6,6-heptamethylpiperidine-tert-butylcyclohexyl methacrylate-stearyl methacrylate-styrene-hydroxyethyl acrylate-methacrylic acid copolymer showed gloss 91% with gloss retention .gtoreq.95% after 500 h in a weatherometer.

IT **134708-20-6P**

(manuf. of, for melamine resin-contg. weather-resistant coatings)

RN 134708-20-6 HCA

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, (1,1-dimethylethyl)cyclohexyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-propenoate, octadecyl 2-methyl-2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

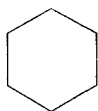
CM 1

CRN 82277-46-1

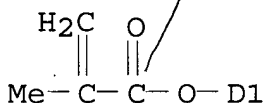
CMF C14 H24 O2

CCI IDS

CDES 8:ID



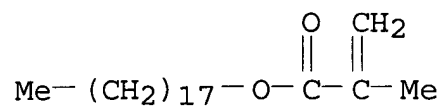
D1-Bu-t



CM 2

CRN 32360-05-7

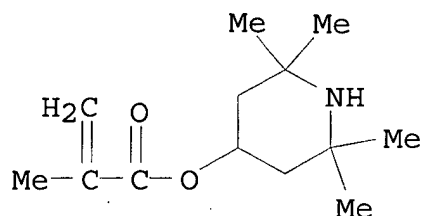
CMF C22 H42 O2



CM 3

CRN 31582-45-3

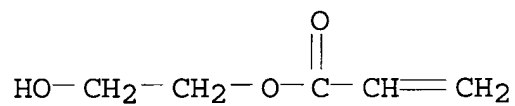
CMF C13 H23 N O2



CM 4

CRN 818-61-1

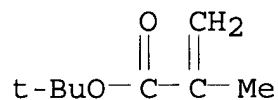
CMF C5 H8 O3



CM 5

CRN 585-07-9

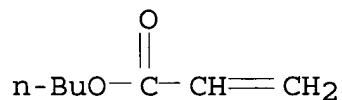
CMF C8 H14 O2



CM 6

CRN 141-32-2

CMF C7 H12 O2

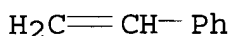




CM 7

CRN 100-42-5

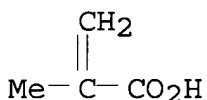
CMF C8 H8



CM 8

CRN 79-41-4

CMF C4 H6 O2



IC ICM C09D161-20

ICS C09D133-04; C09D133-26

CC 42-7 (Coatings, Inks, and Related Products)

ST weather resistance acrylic polymer coating; **UV** stabilizing acrylate **polymer** coating; methacryloyloxyheptamethylpiperidine copolymer coating; tertiary butylcyclohexyl methacrylate copolymer coating; hydroxyethyl acrylate copolymer coating; stearyl methacrylate copolymer coating; styrene acrylic coating weather resistant; methacrylic copolymer coating; aminoplast acrylic coating; melamine resin acrylic coating

IT Coating materials  
(weather-resistant, **UV**-stabilizing acrylic **polymer**, aminoplast-crosslinked)

IT 9003-08-1  
(coatings contg. **UV**-stabilizing acrylic **polymers** and Super-Beckamine 47-508-60)

IT 126289-10-9P 126428-42-0P 134685-20-4P 134685-21-5P  
**134708-20-6P** 134708-21-7P

(manuf. of, for melamine resin-contg. weather-resistant coatings)

L27 ANSWER 25 OF 28 HCA COPYRIGHT 2002 ACS

112:160634 Preparation of UV-resistant copolymers for coatings. Nakagaw, Hiroo; Matuda, Tatsuhito; Adachi, Masato; Nakazaki, Mitsuo; Aoyama, Takahiro; Hashiguchi, Shoji; Yoshida, Masaya (Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan). Eur. Pat. Appl. EP 337744 A2 19891018, 24 pp. DESIGNATED STATES: R: BE, DE, FR, GB, IT, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1989-303589 19890412. PRIORITY: JP 1988-88280 19880412.

AB The title polymers, resistant to weathering, contain **polymerizable UV** stabilizers and monomers contg. cycloalkyl groups. Thus, AIBN-initiated polymn. of 3 parts

1,2,2,6,6-pentamethyl-4-piperidinyll methacrylate and 47 parts cyclohexyl methacrylate (I) in 50:50 BuOH-PhMe at 80.degree. gave a 50.1% soln. of copolymer (II) with no.-av. mol. wt. 100,000. Spraying a mixt. of II soln. 100, PhMe 33, and BuOH 33 parts on polyurethane-primed, phosphated metal and drying for 1 wk gave a 20-.mu.m film with 60.degree. gloss 99.0, gloss retention after 2000 h weatherometer exposure >95%, and good resistance to cracking and blistering; vs. 96.0, 70, poor, and poor, resp., with styrene in place of I.

IT 126393-45-1P

(coatings, weather-resistant, manuf. of)

RN 126393-45-1 HCA

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with butyl 2-propenoate, (1,1-dimethylethyl)cyclohexyl 2-methyl-2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidinyll 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

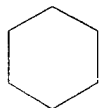
CM 1

CRN 82277-46-1

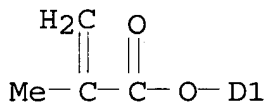
CMF C14 H24 O2

CCI IDS

CDES 8:ID



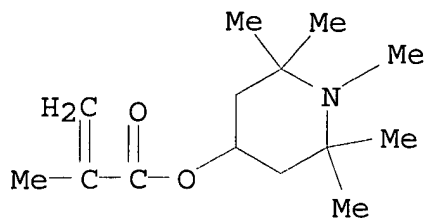
D1-Bu-t



CM 2

CRN 68548-08-3

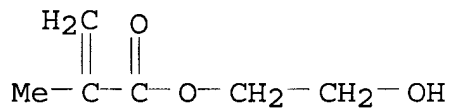
CMF C14 H25 N O2



CM 3

CRN 868-77-9

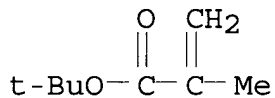
CMF C6 H10 O3



CM 4

CRN 585-07-9

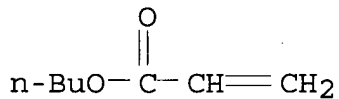
CMF C8 H14 O2



CM 5

CRN 141-32-2

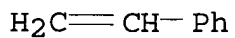
CMF C7 H12 O2



CM 6

CRN 100-42-5

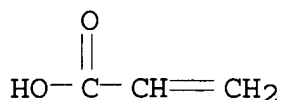
CMF C8 H8



CM 7

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08F220-34

ICS C08F220-60; C08F220-18; C09D003-80

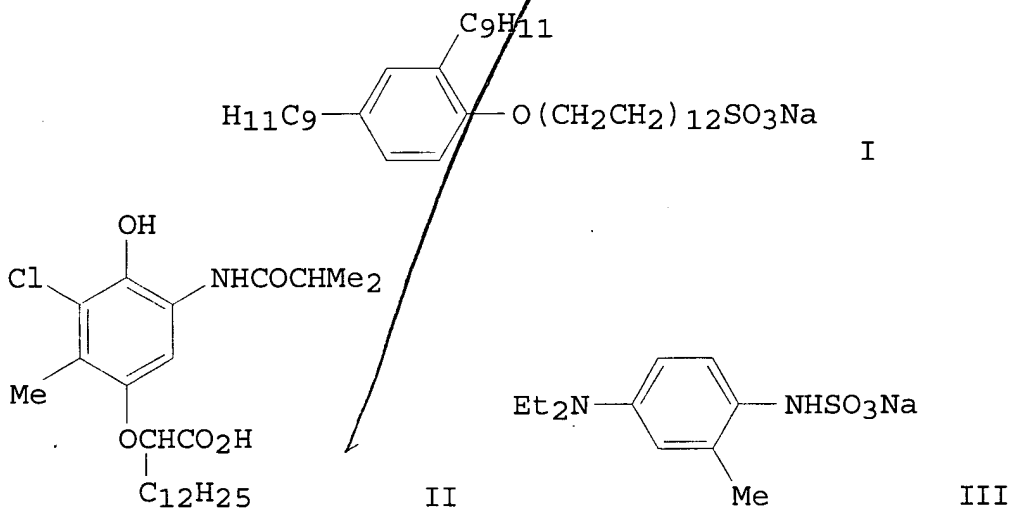
CC 42-7 (Coatings, Inks, and Related Products)

IT 126288-86-6P 126289-10-9P **126393-45-1P** 126428-40-8P,  
 Cyclohexyl methacrylate-1,2,2,6,6-pentamethyl-4-piperidinyl  
 methacrylate copolymer 126428-41-9P, tert-Butyl  
 methacrylate-1,2,2,6,6-pentamethyl-4-piperidinyl methacrylate  
 copolymer 126428-42-0P 126428-43-1P 126428-44-2P  
 126428-45-3P, Acrylic acid-cyclohexyl methacrylate-2-ethylhexyl  
 acrylate-2,2,6,6-pentamethyl-4-piperidinyl methacrylate copolymer  
 (coatings, weather-resistant, manuf. of)

L27 ANSWER 26 OF 28 HCA COPYRIGHT 2002 ACS

104:196907 Thermally developed color photographic material undercoat.  
 Ishikawa, Hisashi; Masukawa, Toyooki; Iwagaki, Masaru; Komamura,  
 Tawara; Hoshino, Kimie (Konishiroku Photo Industry Co., Ltd.,  
 Japan). Jpn. Kokai Tokkyo Koho JP 60239745 A2 19851128 Showa, 14  
 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1984-97251  
 19840514.

GI



AB A photothermog. material has **photosensitive** layers on a base subbed with a copolymer of vinyl monomers. The material provides color images by simple dry process, without accidental transfer of the **photosensitive** layer to the receptor sheet during thermal transfer. Thus, a compn. contg. 2-hydroxyethyl methacrylate 75, Bu acrylate 90, tert-Bu acrylate 75, styrene 60, Na dodecylbenzenesulfonate 6, ammonium peroxydisulfate 1, and H2O 700 parts was emulsion-polymd. to provide emulsion contg. 30% solid polymer. A 100 .mu.m PET (polymer) film was coated with a mixt. of 10 mL of the above emulsion, 20 mg of a surfactant I, 30 mg hexamethylene-1,6-bis(ethyleneurea), and 90 mL H2O, and dried to form a 0.6 g/m2 subbing layer and overcoated with a **photosensitive** compn. contg. Ag salt of 4-sulfobenzotriazole, dye precursor II, poly(vinylpyrrolidone), pentaerythritol, poly(ethylene glycol), a developer III, and Ag(I,Br) emulsion and gelatin to form 65 .mu.m wet layer. The obtained material was imagewise exposed and the image was transferred to a receptor paper coated with PVC, by pressing together at 140.degree. for 80 s. Peeling off showed transferred image on the receptor, with no occurrence of transfer of the photog. layer to the receptor. When the PET film was not subbed, 45% of the photog. layer was transferred.

IT 90885-27-1 102128-26-7

(photothermog. color transfer material with subbing layer from)

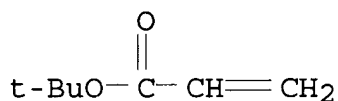
RN 90885-27-1 HCA

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

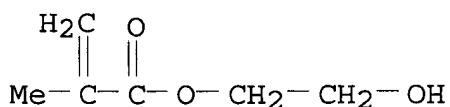
CMF C7 H12 O2



CM 2

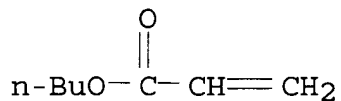
CRN 868-77-9

CMF C6 H10 O3



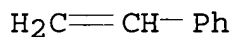
CM 3

CRN 141-32-2  
CMF C7 H12 O2



CM 4

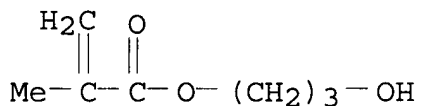
CRN 100-42-5  
CMF C8 H8



RN 102128-26-7 HCA  
CN 2-Propenoic acid, 2-methyl-, 3-hydroxypropyl ester, polymer with  
1,1-dimethylethyl 2-propenoate, ethenylbenzene and propyl  
2-propenoate (9CI) (CA INDEX NAME)

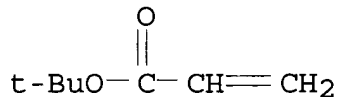
CM 1

CRN 2761-09-3  
CMF C7 H12 O3



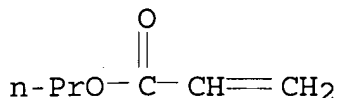
CM 2

CRN 1663-39-4  
CMF C7 H12 O2



CM 3

CRN 925-60-0  
CMF C6 H10 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-72

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 25035-75-0 26124-53-8 57863-61-3 72356-26-4 **90885-27-1**  
90885-29-3 **102128-26-7**

(photothermog. color transfer material with subbing layer from)

IT 115-77-5, uses and miscellaneous 9003-39-8 25322-68-3  
81910-16-9 87457-72-5 102187-18-8(photothermog. material for color transfer process with  
**photosensitive** layer contg., subbing layers for, from  
vinyl polymers)

L27 ANSWER 27 OF 28 HCA COPYRIGHT 2002 ACS

102:36606 Photographic elements. (Konishiroku Photo Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 59107352 A2 19840621 Showa, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1982-201593 19821116.

AB A photog. material contg. a neutralization layer, a timing layer, and photog. layers contg. a hydrophilic org. colloid on a support has a primer layer contg. noncryst. gelatin and a polymer latex between the timing and the photog. layers. The photog. material which has improved adhesivity between the timing and the photog. layers even under wet conditions is useful for color and 2 sheet-type diffusion-transfer photog. films. Thus, a poly(ethylene terephthalate) film was coated successively with a neutralization layer, a timing layer, a primer layer contg. Bu acrylate-glycidyl methacrylate-styrene copolymer latex, and gelatin, dried at 100.degree. for 3 min, then with photog. layers, and a protective layer. The material showed good adhesion between the timing and the photog. layers.

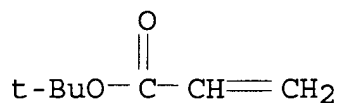
IT **90885-27-1**(latex, photog. diffusion-transfer element contg. primer layer of, situated between timing and **photosensitive** layer)

RN 90885-27-1 HCA

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

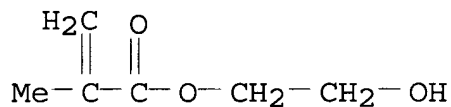
CM 1

CRN 1663-39-4  
 CMF C7 H12 O2



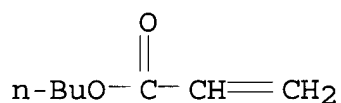
CM 2

CRN 868-77-9  
 CMF C6 H10 O3



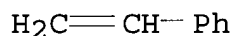
CM 3

CRN 141-32-2  
 CMF C7 H12 O2



CM 4

CRN 100-42-5  
 CMF C8 H8



IC G03C007-00  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 IT Photographic films  
     (diffusion-transfer, primer layer for, contg. gelatin and polymeric latex situated between timing and **photosensitive** layers for improved adhesion properties)  
 IT 26338-86-3 60827-06-7 60950-94-9 **90885-27-1**  
     (latex, photog. diffusion-transfer element contg. primer layer)



of, situated between timing and **photosensitive** layer)

IT 26428-43-3

(latex, photog. primer layer contg. gelatin and, situated between timing and **photosensitive** layers of diffusion-transfer films)

IT 822-06-0 959-52-4 1330-78-5 3352-87-2 7631-86-9, uses and miscellaneous 13047-13-7 19992-12-2 23939-33-5 25119-83-9 26124-53-8 53197-94-7 61699-87-4 72765-13-0 72771-15-4 84405-89-0 93928-93-9 93928-94-0 94105-92-7 94105-93-8 94119-83-2 94130-54-8 94157-68-3

(photog. diffusion-transfer element contg., primer layer contg. gelatin and polymeric latex for, situated between timing and **photosensitive** layers)

L27 ANSWER 28 OF 28 HCA COPYRIGHT 2002 ACS

101:31073 Photographic supports. Yamazaki, Toshiaki; Nakadate, Takanori; Kitahara, Kenichi; Fujimori, Noboru; Kobayashi, Morio; Shimosaki, Ryuji (Konishiroku Photo Industry Co., Ltd., Japan). Ger. Offen. DE 3326507 A1 19840126, 64 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1983-3326507 19830722. PRIORITY: JP 1982-127467 19820723; JP 1982-128986 19820726; JP 1982-129605 19820727.

AB Photog. supports possessing good adhesion characteristics are composed of a polyester film having on .gtoreq.1 side an adhesion or subbing layer prep'd. from an aq. soln. of a mixed polymer contg. monomers of the formulas CH<sub>2</sub>:CRCO<sub>2</sub>ZOH (R = H or Me; Z = C<sub>2</sub>-4 alkylene), CH<sub>2</sub>:CHCO<sub>2</sub>R<sub>1</sub> (R<sub>1</sub> = C<sub>2</sub>-8 alkyl), PhCH:CH<sub>2</sub>, and/or CH<sub>2</sub>:CR<sub>2</sub>CO<sub>2</sub>R<sub>3</sub> (R<sub>2</sub> = H or Me; R<sub>3</sub> = C<sub>2</sub>-8 alkyl). Thus, a biaxially oriented and thermally fixed poly(ethylene terephthalate) film of 100 .mu.m thick was corona discharge-treated at 30 W/m<sup>2</sup>/min and then coated with a compn. contg. a Bu acrylate-2-hydroxyethyl methacrylate-styrene copolymer (35:25:40) 10 mL, 2-C<sub>9</sub>H<sub>19</sub>-4-C<sub>9</sub>H<sub>19</sub>C<sub>6</sub>H<sub>3</sub>O(CH<sub>2</sub>CH<sub>2</sub>O)<sub>12</sub> SO<sub>3</sub>Na 20, 1,6-hexamethylene bisethyleneurea 30 mg, and water 90 mL at 20 .mu.m and then dried for 1 min at 100.degree.. After coating this adhesion layer with a top layer from a soln. of gelatin 1 g, saponin 20 mg, and H<sub>2</sub>O 100 mL and drying for 1 min at 100.degree., the support was then coated with a **photosensitive** copying layer. The resultant material showed a mech. stability of .gtoreq.30 min, a transparency of 0.5%, a processed film adhesion of 100%, and a dry film adhesion of 90% vs. 20 min, 0.5%, 60%, and 70%, resp., for a control using a butadiene-2-hydroxyethyl methacrylate-styrene copolymer layer.

IT 90885-27-1 90885-28-2

(coatings, subbing, on polyester photog. film supports)

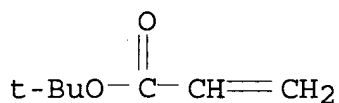
RN 90885-27-1 HCA

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1663-39-4

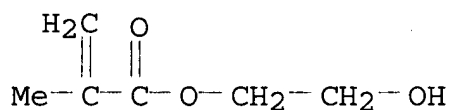
CMF C7 H12 O2



CM 2

CRN 868-77-9

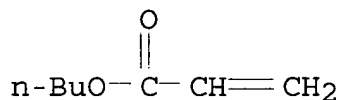
CMF C6 H10 O3



CM 3

CRN 141-32-2

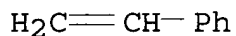
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



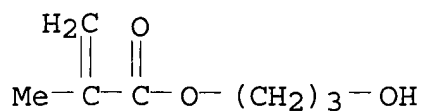
RN 90885-28-2 HCA

CN 2-Propenoic acid, 2-methyl-, 3-hydroxypropyl ester, polymer with  
1,1-dimethylethyl 2-propenoate, ethenylbenzene and propyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2761-09-3

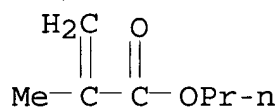
CMF C7 H12 O3



CM 2

CRN 2210-28-8

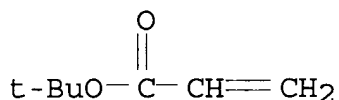
CMF C7 H12 O2



CM 3

CRN 1663-39-4

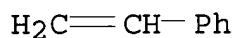
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC G03C001-80; C09D003-80; B32B027-36; B32B027-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 26916-03-0 72356-26-4 90885-19-1 90885-20-4 90885-21-5  
 90885-22-6 90885-23-7 90885-24-8 90885-25-9 90885-26-0  
 90885-27-1 90885-28-2 90885-29-3 90885-30-6

(coatings, subbing, on polyester photog. film supports)